Cys Asn Val Thr Gly Tyr Glu Gly Pro Ala Gln Gln Asn Phe Glu Trp 50 60

Phe Leu Tyr Arg Pro Glu Ala Pro Asp Thr Ala Leu Gly Ile Val Ser 65 70 75 80

Thr Lys Asp Thr Gln Phe Ser Tyr Ala Val Phe Lys Ser Arg Val Val 85 90 95

Ala Gly Glu Val Gln Val Gln Arg Leu Gln Gly Asp Ala Val Val Leu 100 105 110

Lys Ile Ala Arg Leu Gln Ala Gln Asp Ala Gly Ile Tyr Glu Cys His 115 120 125

Thr Pro Ser Thr Asp Thr Arg Tyr Leu Gly Ser Tyr Ser Gly Lys Val 130 135 140

Glu Leu Arg Val Leu Pro Asp Val Leu Gln Val Ser Ala Ala Pro Pro 145 150 155 160

Gly Pro Arg Gly Arg Gln Ala Pro Thr Ser Pro Pro Arg Met Thr Val 165 170 175

His Glu Gly Gln Glu Leu Ala Leu Gly Cys Leu Ala Arg Thr Ser Thr 180 \$185 190

Gln Lys His Thr His Leu Ala Val Ser Phe Gly Arg Ser Val Pro Glu 195 200 205

Ala Pro Val Gly Arg Ser Thr Leu Gln Glu Val Val Gly Ile Arg Ser 210 215 220

Asp Leu Ala Val Glu Ala Gly Ala Pro Tyr Ala Glu Arg Leu Ala Ala 225 230 235 240

Gly Glu Leu Arg Leu Gly Lys Glu Gly Thr Asp Arg Tyr Arg Met Val 245 250 255

Val Gly Gly Ala Gln Ala Gly Asp Ala Gly Thr Tyr His Cys Thr Ala 260 265 270

Ala Glu Trp Ile Gln Asp Pro Asp Gly Ser Trp Ala Gln Ile Ala 275 280 285

<210> 2172

<211> 613

<212> PRT

<213> Homo sapiens

<400> 2172

Met Gly Ala Leu Arg Pro Thr Leu Leu Pro Pro Ser Leu Pro Leu Leu 1 5 10 15

Leu Leu Met Leu Gly Met Gly Cys Trp Ala Arg Glu Val Leu Val 20 25 30

Pro Glu Gly Pro Leu Tyr Arg Val Ala Gly Thr Ala Val Ser Ile Ser 1428

35 40 45

Cys Asn Val Thr Gly Tyr Glu Gly Pro Ala Gln Gln Asn Phe Glu Trp 50 60

Phe Leu Tyr Arg Pro Glu Ala Pro Asp Thr Ala Leu Gly Ile Val Ser 65 70 75 80

Thr Lys Asp Thr Gln Phe Ser Tyr Ala Val Phe Lys Ser Arg Val Val 85 90 95

Ala Gly Glu Val Gln Val Gln Arg Leu Gln Gly Asp Ala Val Val Leu 100 105 110

Lys Ile Ala Arg Leu Gln Ala Gln Asp Ala Gly Ile Tyr Glu Cys His 115 120 125

Thr Pro Ser Thr Asp Thr Arg Tyr Leu Gly Ser Tyr Ser Gly Lys Val 130 135 140

Glu Leu Arg Val Leu Pro Asp Val Leu Gln Val Ser Ala Ala Pro Pro 145 150 155 160

Gly Pro Arg Gly Arg Gln Ala Pro Thr Ser Pro Pro Arg Met Thr Val 165 170 175

His Glu Gly Gln Glu Leu Ala Leu Gly Cys Leu Ala Arg Thr Ser Thr 180 185 190

Gln Lys His Thr His Leu Ala Val Ser Phe Gly Arg Ser Val Pro Glu 195 200 205

Ala Pro Val Gly Arg Ser Thr Leu Gln Glu Val Val Gly Ile Arg Ser 210 215 220

Asp Leu Ala Val Glu Ala Gly Ala Pro Tyr Ala Glu Arg Leu Ala Ala 225 230 235 240

Gly Glu Leu Arg Leu Gly Lys Glu Gly Thr Asp Arg Tyr Arg Met Val 245 250 255

Val Gly Gly Ala Gln Ala Gly Asp Ala Gly Thr Tyr His Cys Thr Ala 260 265 270

Ala Glu Trp Ile Gln Asp Pro Asp Gly Ser Trp Ala Gln Ile Ala Glu 275 280 285

Lys Arg Ala Val Leu Ala His Val Asp Val Gln Thr Leu Ser Ser Gln 290 295 300

Leu Ala Val Thr Val Gly Pro Gly Glu Arg Arg Ile Gly Pro Gly Glu 305 310 315 320

Pro Leu Glu Leu Cys Asn Val Ser Gly Ala Leu Pro Pro Ala Gly 325 330 335

Arg His Ala Ala Tyr Ser Val Gly Trp Glu Met Ala Pro Ala Gly Ala 340 345 350

Pro Gly Pro Gly Arg Leu Val Ala Gln Leu Asp Thr Glu Gly Val Gly

355 360 365

Ser Leu Gly Pro Gly Tyr Glu Gly Arg His Ile Ala Met Glu Lys Val 370 375 380

Ala Ser Arg Thr Tyr Arg Leu Arg Leu Glu Ala Ala Arg Pro Gly Asp 385 390 395 400

Ala Gly Thr Tyr Arg Cys Leu Ala Lys Ala Tyr Val Arg Gly Ser Gly 405 410 415

Thr Arg Leu Arg Glu Ala Ala Ser Ala Arg Ser Arg Pro Leu Pro Val 420 425 430

His Val Arg Glu Glu Gly Val Val Leu Glu Ala Val Ala Trp Leu Ala 435 440 445

Gly Gly Thr Val Tyr Arg Gly Glu Thr Ala Ser Leu Leu Cys Asn Ile 450 455 460

Ser Val Arg Gly Gly Pro Pro Gly Leu Arg Leu Ala Ala Ser Trp Trp 465 470 475 480

Val Glu Arg Pro Glu Asp Gly Glu Leu Ser Ser Val Pro Ala Gln Leu 485 490 495

Val Gly Gly Val Gly Gln Asp Gly Val Ala Glu Leu Gly Val Arg Pro 500 505 510

Gly Gly Pro Val Ser Val Glu Leu Val Gly Pro Arg Ser His Arg 515 520 525

Leu Arg Leu His Ser Leu Gly Pro Glu Asp Glu Gly Val Tyr His Cys 530 535 540

Ala Pro Ser Ala Trp Val Gln His Ala Asp Tyr Ser Trp Tyr Gln Ala 545 550 555 560

Gly Ser Ala Arg Ser Gly Pro Val Thr Val Tyr Pro Tyr Met His Ala 565 570 575

Leu Asp Thr Leu Phe Val Pro Leu Leu Val Gly Thr Gly Val Ala Leu 580 585 590

Val Thr Gly Ala Thr Val Leu Gly Thr Ile Thr Cys Cys Phe Met Lys 595 600 605

Arg Leu Arg Lys Arg 610

<210> 2173

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2173

Met Trp Gly Trp Gly Ser Leu Val Ser Ala Arg Gly Gly Trp Gly Val

1 5 10 15

Phe Ile Tyr Leu Tyr Met Gly Leu Tyr Ile Val Leu Trp Gly Met Gly 20 25 30

Glu Pro Ala Gly Gly Glu Asn Pro Pro Leu Ser Pro His Pro Pro Gly 35 40 45

Arg Ala Asn Val Lys Leu Leu Ile Phe Val Leu Tyr Ile Phe Tyr Ile 50 55 60

Asn Ile Ser Ile Phe Phe Leu Gln Asn Gln Phe Ile Asn Gly Arg Gly 65 70 75 80

Val Trp Gly Gly His Met Glu Leu Pro Leu Trp Gly Gly Pro Leu His
85 90 95

Tyr Pro Thr Tyr Arg Pro Phe Pro His Pro Pro Pro His Ser Pro Pro 100  $\,$  105  $\,$  110  $\,$ 

Pro Gly Cys Asp Cys Cys Lys Met Gly Val 115 120

<210> 2174

<211> 613

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (507)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 2174

Met Gly Ala Leu Arg Pro Thr Leu Leu Pro Pro Ser Leu Pro Leu Leu 1 5 10 15

Leu Leu Met Leu Gly Met Gly Cys Trp Ala Arg Glu Val Leu Val 20 25 30

Pro Glu Gly Pro Leu Tyr Arg Val Ala Gly Thr Ala Val Ser Ile Ser 35 40 45

Cys Asn Val Thr Gly Tyr Glu Gly Pro Ala Gln Gln Asn Phe Glu Trp 50 55 60

Phe Leu Tyr Arg Pro Glu Ala Pro Asp Thr Ala Leu Gly Ile Val Ser 65 70 75 80

Thr Lys Asp Thr Gln Phe Ser Tyr Ala Val Phe Lys Ser Arg Val Val 85 90 95

Ala Gly Glu Val Gln Val Gln Arg Leu Gln Gly Asp Ala Val Val Leu 100 105 110

Lys Ile Ala Arg Leu Gln Ala Gln Asp Ala Gly Ile Tyr Glu Cys His
115 120 125

Thr Pro Ser Thr Asp Thr Arg Tyr Leu Gly Ser Tyr Ser Gly Lys Val

130 135 140

Glu 145	Leu	Arg	Val	Leu	Pro 150	Asp	Val	Leu	Gln	Val 155	Ser	Ala	Ala	Pro	Pro 160
Gly	Pro	Arg	Gly	Arg 165	Gln	Ala	Pro	Thr	Ser 170	Pro	Pro	Arg	Met	Thr 175	Val
His	Glu	Gly	Gln 180	Glu	Leu	Ala	Leu	Gly 185	Cys	Leu	Ala	Arg	Thr 190	Ser	Thr
Gln	Lys	His 195	Thr	His	Leu	Ala	Val 200	Ser	Phe	Gly	Arg	Ser 205	Val	Pro	Glu
Ala	Pro 210	Val	Gly	Arg	Ser	Thr 215	Leu	Gln	Glu	Val	Val 220	Gly	Ile	Arg	Ser
Asp 225	Leu	Ala	Val	Glu	Ala 230	Gly	Ala	Pro	Tyr	Ala 235	Glu	Arg	Leu	Ala	Ala 240
Gly	Glu	Leu	Arg	Leu 245	Gly	Lys	Glu	Gly	Thr 250	Asp	Arg	Tyr	Arg	Met 255	Val
Val	Gly	Gly	Ala 260	Gln	Ala	Gly	Asp	Ala 265	Gly	Thr	Tyr	His	Cys 270	Thr	Ala
Ala	Glu	Trp 275	Ile	Gln	Asp	Pro	Asp 280	Gly	Ser	Trp	Ala	Gln 285	Ile	Ala	Glu
Lys	Arg 290	Ala	Val	Leu	Ala	His 295	Val	Asp	Val	Gln	Thr 300	Leu	Ser	Ser	Gln
Leu 305	Ala	Val	Thr	Val	Gly 310	Pro	Gly	Glu	Arg	Arg 315	Ile	Gly	Pro	Gly	Glu 320
Pro	Leu	Glu	Leu	Leu 325	Cys	Asn	Val	Ser	Gly 330	Ala	Leu	Pro	Pro	Ala 335	Gly
Arg	His	Ala	Ala 340	Tyr	Ser	Val	Gly	Trp 345	Glu	Met	Ala	Pro	Ala 350	Gly	Ala
Pro	Gly	Pro 355	Gly	Arg	Leu	Val	Ala 360	Gln	Leu	Asp	Thr	G1u 365	Gly	Val	Gly
Ser	Leu 370	Gly	Pro	Gly	Tyr	Glu 375	Gly	Arg	His	Ile	Ala 380	Met	Glu	Lys	Val
Ala 385	Ser	Arg	Thr	Tyr	Arg 390	Leu	Arg	Leu	Glu	Ala 395	Ala	Arg	Pro	Gly	Asr 400
Ala	Gly	Thr	Tyr	Arg 405	Cys	Leu	Ala	Lys	Ala 410	Tyr	Val	Arg	Gly	Ser 415	Gl
Thr	Arg	Leu	Arg 420	Glu	Ala	Ala	Ser	Ala 425	Arg	Ser	Arg	Pro	Leu 430	Pro	Val
His	Val	Arg 435	Glu	Glu	Gly	Val	Val 440	Leu	Glu	Ala	Val	Ala 445	Trp	Leu	Ala
Gly	Gly	Thr	Val	Tyr	Arg	Gly	Glu	Thr	Ala	Ser	Leu	Leu	Cys	Asn	Ile

1432

450 455 460

Ser Val Arg Gly Gly Pro Pro Gly Leu Arg Leu Ala Ala Ser Trp Trp 465 470 475 480

Val Glu Arg Pro Glu Asp Gly Glu Leu Ser Ser Val Pro Ala Gln Leu 485 490 495

Val Gly Gly Val Gly Gln Asp Gly Val Ala Xaa Leu Gly Val Arg Pro $500 \hspace{1.5cm} 505 \hspace{1.5cm} 510$ 

Gly Gly Gly Pro Val Ser Val Glu Leu Val Gly Pro Arg Ser His Arg  $515 \\ \hspace{1.5cm} 520 \\ \hspace{1.5cm} 525$ 

Leu Arg Leu His Ser Leu Gly Pro Glu Asp Glu Gly Val Tyr His Cys 530 540

Ala Pro Ser Ala Trp Val Gln His Ala Asp Tyr Ser Trp Tyr Gln Ala 545 550 555 560

Gly Ser Ala Arg Ser Gly Pro Val Thr Val Tyr Pro Tyr Met His Ala 565 570 575

Leu Asp Thr Leu Phe Val Pro Leu Leu Val Gly Thr Gly Val Ala Leu 580 585 590

Val Thr Gly Ala Thr Val Leu Gly Thr Ile Thr Cys Cys Phe Met Lys 595 600 605

Arg Leu Arg Lys Arg 610

<210> 2175

<211> 60

<212> PRT

<213> Homo sapiens

<400> 2175

Met Ala Trp Ala Val Thr Leu Ile Leu Ser Leu Ser Arg Ala Val Arg

1 10 15

Thr Gln Glu Val Pro Met Ala Leu Gln Ala His Ser Gly Ile Gln Leu 20 25 30

Ala Ser Arg Val Gly Leu Pro Gly Pro Trp Pro Glu Cys Ser Thr Leu 35 40 45

Ser Ser Arg Cys His Leu Ser Met Asp Ser Lys Val 50 55 60

<210> 2176

<211> 396

<212> PRT

<213> Homo sapiens

<400> 2176

305

Met Trp Trp Leu Leu Trp Gly Val Leu Gln Ala Cys Pro Thr Arg Gly Ser Val Leu Leu Ala Gln Glu Leu Pro Gln Gln Leu Thr Ser Pro Gly Tyr Pro Glu Pro Tyr Gly Lys Gly Gln Glu Ser Ser Thr Asp Ile Lys Ala Pro Glu Gly Phe Ala Val Arg Leu Val Phe Gln Asp Phe Asp Leu Glu Pro Ser Gln Asp Cys Ala Gly Asp Ser Val Thr Ile Ser Phe Val Gly Ser Asp Pro Ser Gln Phe Cys Gly Gln Gln Gly Ser Pro Leu Gly Arg Pro Pro Gly Gln Arg Glu Phe Val Ser Ser Gly Arg Ser Leu Arg Leu Thr Phe Arg Thr Gln Pro Ser Ser Glu Asn Lys Thr Ala His 120 Leu His Lys Gly Phe Leu Ala Leu Tyr Gln Thr Val Ala Val Asn Tyr 135 Ser Gln Pro Ile Ser Glu Ala Ser Arg Gly Ser Glu Ala Ile Asn Ala 145 150 Pro Gly Asp Asn Pro Ala Lys Val Gln Asn His Cys Gln Glu Pro Tyr 165 Tyr Gln Ala Ala Ala Gly Ala Leu Thr Cys Ala Thr Pro Gly Thr 180 185 Trp Lys Asp Arg Gln Asp Gly Glu Glu Val Leu Gln Cys Met Pro Val 200 Cys Gly Arg Pro Val Thr Pro Ile Ala Gln Asn Gln Thr Thr Leu Gly 215 Ser Ser Arg Ala Lys Leu Gly Asn Phe Pro Trp Gln Ala Phe Thr Ser Ile His Gly Arg Gly Gly Ala Leu Leu Gly Asp Arg Trp Ile Leu 245 Thr Ala Ala His Thr Ile Tyr Pro Lys Asp Ser Val Ser Leu Arg Lys 265 Asn Gln Ser Val Asn Val Phe Leu Gly His Thr Ala Ile Asp Glu Met 280 275 Leu Lys Leu Gly Asn His Pro Val His Arg Val Val His Pro Asp 295

315

Tyr Arg Gln Asn Glu Ser His Asn Phe Ser Gly Asp Ile Ala Leu Leu

310

Glu Leu Gln His Ser Ile Pro Leu Gly Pro Asn Val Leu Pro Val Cys 325 330 335

Leu Pro Asp Asn Glu Thr Leu Tyr Arg Ser Gly Leu Leu Gly Tyr Val 340 345 350

Ser Gly Phe Gly Met Glu Met Gly Trp Leu Thr Thr Glu Leu Lys Tyr 355 360 365

Ser Arg Leu Pro Val Ala Pro Arg Glu Ala Cys Asn Ala Trp Leu Gln 370 375 380

Lys Arg Gln Arg Pro Glu Lys Lys Lys Lys Lys 385 390 395

<210> 2177

<211> 172

<212> PRT

<213> Homo sapiens

<400> 2177

Gly Thr Arg Thr Glu Arg Asp Glu Leu Leu Lys Asp Leu Gln Gln Ser 1 5 10 15

Ile Ala Arg Glu Pro Ser Ala Pro Ser Ile Pro Thr Pro Ala Tyr Glu 20 25 30

Ser Leu Pro Ala Gly Gly His Ala Pro Thr Pro Pro Thr Pro Ala Pro 35  $\phantom{-}40\phantom{+}45\phantom{+}$ 

Arg Thr Met Pro Pro Thr Lys Pro Gln Pro Pro Ala Arg Pro Pro Pro 50 55 60

Pro Val Leu Pro Ala Asn Arg Ala Pro Ser Ala Thr Ala Pro Ser Pro 65 70 75 80

Val Gly Ala Gly Thr Ala Ala Pro Ala Pro Ser Gln Thr Pro Gly Ser 85 90 95

Ala Pro Pro Gl<br/>n Ala Gl<br/>n Gly Pro Pro Tyr Pro Thr Tyr Pro Gly 100 105 110

Tyr Pro Gly Tyr Cys Gln Met Pro Met Pro Met Gly Tyr Asn Pro Tyr 115 120 125

Ala Tyr Gly Gln Tyr Asn Met Pro Tyr Pro Pro Val Tyr His Gln Ser 130 135 140

Pro Gly Gln Ala Pro Tyr Pro Gly Pro Gln Gln Pro Ser Tyr Pro Phe 145 150 155 160

Pro Gln Pro Pro Gln Gln Ser Tyr Tyr Pro Gln Gln 165 170

<210> 2178 <211> 142

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<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 2178
Met His Gln Leu Gln Leu Gln Arg Gln Glu Pro Cys Arg Leu Leu
Ser Pro Ser Pro Gln Pro Gly Leu His His Leu Cys Phe Gln Gln Ile
                                 25
Glu Leu Leu Leu Leu Leu His Leu Gln Trp Gly Leu Gly Leu Leu
Arg Gln Leu His His Lys Arg Leu Ala Gln Leu Leu His Arg Arg
Arg Asp His Pro Ile Pro Pro Ile Gln Asp Ile Leu Gly Ile Ala Lys
 65
Cys Pro Cys Pro Trp Ala Ile Ile Leu Met Arg Met Ala Ser Ile Ile
Cys His Ile His Gln Cys Ile Thr Arg Val Leu Asp Arg Leu Xaa Thr
                                105
                                                    110
            100
Arg Asp Pro Ser Ser Leu His Thr Pro Ser Leu Ser Pro His Ser Ser
                            120
Leu Thr Ile His Ser Ser Asn Met Ser Ala Gln Gln Leu Ser
    130
                        135
<210> 2179
<211> 868
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (194)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (309)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (550)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 2179
Met Ala Thr Phe Ile Ser Val Gln Leu Lys Lys Thr Ser Glu Val Asp
```

j.h

1 5 10 15

Leu Ala Lys Pro Leu Val Lys Phe Ile Gln Gln Thr Tyr Pro Ser Gly 20 25 30

Gly Glu Glu Gln Ala Gln Tyr Cys Arg Ala Ala Glu Glu Leu Ser Lys 35 40 45

Leu Arg Arg Ala Ala Val Gly Arg Pro Leu Asp Lys His Glu Gly Ala 50 60

Leu Glu Thr Leu Leu Arg Tyr Tyr Asp Gln Ile Cys Ser Ile Glu Pro
65 70 75 80

Lys Phe Pro Phe Ser Glu Asn Gln Ile Cys Leu Thr Phe Thr Trp Lys 85 90 95

Asp Ala Phe Asp Lys Gly Ser Leu Phe Gly Gly Ser Val Lys Leu Ala 100 105 110

Leu Ala Ser Leu Gly Tyr Glu Lys Ser Cys Val Leu Phe Asn Cys Ala 115 120 125

Ala Leu Ala Ser Gln Ile Ala Ala Glu Gln Asn Leu Asp Asn Asp Glu 130 135 140

Gly Leu Lys Ile Ala Ala Lys His Tyr Gln Phe Ala Ser Gly Ala Phe 145 150 155 160

Leu His Ile Lys Glu Thr Val Leu Ser Ala Leu Ser Arg Glu Pro Thr 165 170 175

Val Asp Ile Ser Pro Asp Thr Val Gly Thr Leu Ser Leu Ile Met Leu 180 185 190

Ala Xaa Ala Gln Glu Val Phe Phe Leu Lys Ala Thr Arg Asp Lys Met 195 200 205

Lys Asp Ala Ile Ile Ala Lys Leu Ala Asn Gln Ala Ala Asp Tyr Phe 210 215 220

Gly Asp Ala Phe Lys Gln Cys Gln Tyr Lys Asp Thr Leu Pro Lys Glu 225 230 235 240

Val Phe Pro Val Leu Ala Ala Lys His Cys Ile Met Gln Ala Asn Ala 245 250 255

Glu Tyr His Gln Ser Ile Leu Ala Lys Gln Gln Lys Lys Phe Gly Glu 265 270

Glu Ile Ala Arg Leu Gln His Ala Ala Glu Leu Ile Lys Thr Val Ala 275 280 285

Ser Arg Tyr Asp Glu Tyr Val Asn Val Lys Asp Phe Ser Asp Lys Ile 290 295 300

Asn Arg Ala Leu Xaa Ala Ala Lys Lys Asp Asn Asp Phe Ile Tyr His 305 310 315 320

Asp Arg Val Pro Asp Leu Lys Asp Leu Asp Pro Ile Gly Lys Ala Thr

325 330 335

Leu Val Lys Ser Thr Pro Val Asn Val Pro Ile Ser Gln Lys Phe Thr 345 340 Asp Leu Phe Glu Lys Met Val Pro Val Ser Val Gln Gln Ser Leu Ala 360 Ala Tyr Asn Gln Arg Lys Ala Asp Leu Val Asn Arg Ser Ile Ala Gln 375 Met Arg Glu Ala Thr Thr Leu Ala Asn Gly Val Leu Ala Ser Leu Asn 390 395 Leu Pro Ala Ala Ile Glu Asp Val Ser Gly Asp Thr Val Pro Gln Ser 410 Ile Leu Thr Lys Ser Arg Ser Val Ile Glu Gln Gly Gly Ile Gln Thr Val Asp Gln Leu Ile Lys Glu Leu Pro Glu Leu Leu Gln Arg Asn Arg 440 Glu Ile Leu Asp Glu Ser Leu Arg Leu Leu Asp Glu Glu Glu Ala Thr 455 Asp Asn Asp Leu Arg Ala Lys Phe Lys Glu Arg Trp Gln Arg Thr Pro 470 475 Ser Asn Glu Leu Tyr Lys Pro Leu Arg Ala Glu Gly Thr Asn Phe Arg 485 Thr Val Leu Asp Lys Ala Val Gln Ala Asp Gly Gln Val Lys Glu Cys 505 Tyr Gln Ser His Arg Asp Thr Ile Val Leu Cys Lys Pro Glu Pro 520 Glu Leu Asn Ala Ala Ile Pro Ser Ala Asn Pro Ala Lys Thr Met Gln 535 Gly Ser Glu Val Val Xaa Val Leu Lys Ser Leu Leu Ser Asn Leu Asp 550 555 Glu Val Lys Lys Glu Arg Glu Gly Leu Glu Asn Asp Leu Lys Ser Val 570 Asn Phe Asp Met Thr Ser Lys Phe Leu Thr Ala Leu Ala Gln Asp Gly 585 Val Ile Asn Glu Glu Ala Leu Ser Val Thr Glu Leu Asp Arg Val Tyr 600 Gly Gly Leu Thr Thr Lys Val Gln Glu Ser Leu Lys Lys Gln Glu Gly 610 615 Leu Leu Lys Asn Ile Gln Val Ser His Gln Glu Phe Ser Lys Met Lys 630 635 Gln Ser Asn Asn Glu Ala Asn Leu Arg Glu Glu Val Leu Lys Asn Leu 645 650 655

Ala Thr Ala Tyr Asp Asn Phe Val Glu Leu Val Ala Asn Leu Lys Glu 660 670

Gly Thr Lys Phe Tyr Asn Glu Leu Thr Glu Ile Leu Val Arg Phe Gln 675 680 685

Asn Lys Cys Ser Asp Ile Val Phe Ala Arg Lys Thr Glu Arg Asp Glu 690 695 700

Leu Leu Lys Asp Leu Gln Gln Ser Ile Ala Arg Glu Pro Ser Ala Pro 705 710 715 720

Ser Ile Pro Thr Pro Ala Tyr Gln Ser Leu Pro Ala Gly Gly His Ala 725 730 735

Pro Thr Pro Pro Thr Pro Ala Pro Arg Thr Met Pro Pro Thr Lys Pro 740 745 750

Gln Pro Pro Ala Arg Pro Pro Pro Pro Val Leu Pro Ala Asn Arg Ala 755 760 765

Pro Ser Ala Thr Ala Pro Ser Pro Val Gly Ala Gly Thr Ala Ala Pro 770 780

Ala Pro Ser Gln Thr Pro Gly Ser Ala Pro Pro Pro Gln Ala Gln Gly 785 790 795 800

Pro Pro Tyr Pro Thr Tyr Pro Gly Tyr Pro Gly Tyr Cys Gln Met Pro 805 810 815

Met Pro Met Gly Tyr Asn Pro Tyr Ala Tyr Gly Gln Tyr Asn Met Pro 820 825 830

Tyr Pro Pro Val Tyr His Gln Ser Pro Gly Gln Ala Pro Tyr Pro Gly 835 840 845

Pro Gln Gln Pro Ser Tyr Pro Phe Pro Gln Pro Pro Gln Gln Ser Tyr 850 855 860

Tyr Pro Gln Gln 865

<210> 2180

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2180

Met Lys Pro Ala Thr Ala Ser Ala Leu Leu Leu Leu Leu Leu Gly Leu  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Ala Trp Thr Gln Gly Ser His Gly Trp Gly Ala Asp Ala Ser Ser Leu 20 25 30

Gln Lys Arg Ala Gly Arg Ala Asp Gln Pro Gly Ala Gly Trp Gln Glu 35 40 45

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Val Ala Ala Val Thr Ser Lys Asn Tyr Asn Tyr Asn Gln His Ala Tyr 50 55 60
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Pro Thr Ala Tyr Gly Gly Lys Tyr Ser Val Lys Thr Pro Ala Lys Gly 65 70 75 80

Gly Val Ser Pro Ser Ser Ser Ala Ser Arg Val Gln Pro Gly Leu Leu 85 90 95

Gln Trp Val Lys Phe Trp 100

<210> 2181

<211> 140

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (36)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 2181

Met Phe Leu Phe Gly Gly Phe Leu Met Thr Leu Phe Gly Leu Phe Val 1 5 10 15

Ser Leu Val Phe Leu Gly Gln Ala Phe Thr Ile Met Leu Val Tyr Val 20 25 30

Trp Ser Arg Xaa Asn Pro Tyr Val Arg Met Asn Phe Phe Gly Leu Leu 35 40 45

Asn Phe Gln Ala Pro Phe Leu Pro Trp Val Leu Met Gly Phe Ser Leu 50 55 60

Leu Leu Gly Asn Ser Ile Ile Val Asp Leu Leu Gly Ile Ala Val Gly 65 70 75 80

His Ile Tyr Phe Phe Leu Glu Asp Val Phe Pro Asn Gln Pro Gly Gly  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ile Arg Ile Leu Lys Thr Pro Ser Ile Leu Lys Ala Ile Phe Asp Thr 100 105 110

Pro Asp Glu Asp Pro Asn Tyr Asn Pro Leu Pro Glu Glu Arg Pro Gly 115 120 125

Gly Phe Ala Trp Gly Glu Gly Gln Arg Leu Gly Gly 130 135 140

<210> 2182

<211> 156

<212> PRT

<213> Homo sapiens

Met Phe Leu Phe Gly Gly Phe Leu Met Thr Leu Phe Gly Leu Phe Val 20 25 30

Ser Leu Val Phe Leu Gly Gln Ala Phe Thr Ile Met Leu Val Tyr Val 35 40 45

Trp Ser Arg Arg Asn Pro Tyr Val Arg Met Asn Phe Phe Gly Leu Leu 50 55 60

Asn Phe Gln Ala Pro Phe Leu Pro Trp Val Leu Met Gly Phe Ser Leu 65 70 75 80

Leu Leu Gly Asn Ser Ile Ile Val Asp Leu Leu Gly Ile Ala Val Gly 85 90 95

His Ile Tyr Phe Phe Leu Glu Asp Val Phe Pro Asn Gln Pro Gly Gly 100 105 110

Ile Arg Ile Leu Lys Thr Pro Ser Ile Leu Lys Ala Ile Phe Asp Thr 115 120 125

Pro Asp Glu Asp Pro Asn Tyr Asn Pro Leu Pro Glu Glu Arg Pro Gly 130 135 140

Gly Phe Ala Trp Gly Glu Gly Gln Arg Leu Gly Gly 145 150 155

<210> 2183

<211> 239

<212> PRT

<213> Homo sapiens

<400> 2183

Met Ala Tyr Gln Ser Leu Arg Leu Glu Tyr Leu Gln Ile Pro Pro Val 1 5 10 15

Ser Arg Ala Tyr Thr Thr Ala Cys Val Leu Thr Thr Ala Ala Val Gln 20 25 30

Leu Glu Leu Ile Thr Pro Phe Gln Leu Tyr Phe Asn Pro Glu Leu Ile 35 40 45

Phe Lys His Phe Gln Ile Trp Arg Leu Ile Thr Asn Phe Leu Phe Phe 50 55 60

Gly Pro Val Gly Phe Asn Phe Leu Phe Asn Met Ile Phe Leu Tyr Arg
65 70 75 80

Tyr Cys Arg Met Leu Glu Glu Gly Ser Phe Arg Gly Arg Thr Ala Asp 85 90 95

Phe Val Phe Met Phe Leu Phe Gly Gly Phe Leu Met Thr Leu Phe Gly 100 105 110

Leu Phe Val Ser Leu Val Phe Leu Gly Gln Ala Phe Thr Ile Met Leu 115 120 125

Val Tyr Val Trp Ser Arg Arg Asn Pro Tyr Val Arg Met Asn Phe Phe 130 140

Gly Leu Leu Asn Phe Gln Ala Pro Phe Leu Pro Trp Val Leu Met Gly 145 150 155 160

Phe Ser Leu Leu Gly Asn Ser Ile Ile Val Asp Leu Leu Gly Ile 165 170 175

Ala Val Gly His Ile Tyr Phe Phe Leu Glu Asp Val Phe Pro Asn Gln  $180 \,$   $185 \,$   $190 \,$ 

Pro Gly Gly Ile Arg Ile Leu Lys Thr Pro Ser Ile Leu Lys Ala Ile 195 200 205

Phe Asp Thr Pro Asp Glu Asp Pro Asn Tyr Asn Pro Leu Pro Glu Glu 210 215 220

Arg Pro Gly Gly Phe Ala Trp Gly Glu Gly Gln Arg Leu Gly Gly 225 230 235

<210> 2184

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2184

Met Thr Leu Phe Gly Leu Phe Val Ser Leu Val Phe Leu Gly Gln Ala 1 5 10 15

Phe Thr Ile Met Leu Val Tyr Val Trp Ser Arg Arg Asn Pro Tyr Val 20 25 30

Arg Met Asn Phe Phe Gly Leu Leu Asn Phe Gln Ala Pro Phe Leu Pro 35 40 45

Trp Val Leu Met Gly Phe Ser Leu Leu Gly Asn Ser Ile Ile Val 50 55 60

Asp Leu Leu Gly Ile Ala Val Gly His Ile Tyr Phe Phe Leu Glu Asp 65 70 75 80

Val Phe Pro Asn Gln Pro Gly Gly Ile Arg Ile Leu Lys Thr Pro Ser 85 90 95

Ile Leu Lys Ala Ile Phe Asp Thr Pro Asp Glu Asp Pro Asn Tyr Asn 100 105 110

Pro Leu Pro Glu Glu Arg Pro Gly Gly Phe Ala Trp Gly Glu Gly Gln 115 120 125

Arg Leu Gly Gly 130 <210> 2185

<211> 339

<212> PRT

<213> Homo sapiens

<400> 2185

Met Ser Trp Ser Thr Phe Leu Leu Ala Glu Ala Cys Gly Phe Thr Gly  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Val Val Ala Val Leu Phe Cys Gly Ile Thr Gln Ala His Tyr Thr Tyr
20 25 30

Asn Asn Leu Ser Val Glu Ser Arg Ser Arg Thr Lys Gln Leu Phe Glu 35 40 45

Val Leu His Phe Leu Ala Glu Asn Phe Ile Phe Ser Tyr Met Gly Leu 50 55 60

Ala Leu Phe Thr Phe Gln Lys His Val Phe Ser Pro Ile Phe Ile Ile 65 70 75 80

Gly Ala Phe Val Ala Ile Phe Leu Gly Arg Ala Ala His Ile Tyr Pro 85 90 95

Leu Ser Phe Phe Leu Asn Leu Gly Arg Arg His Lys Ile Gly Trp Asn 100 105 110

Phe Gln His Met Met Met Phe Ser Gly Leu Arg Gly Ala Met Ala Phe 115 120 125

Ala Leu Ala Ile Arg Asp Thr Ala Ser Tyr Ala Arg Gln Met Met Phe 130 135 140

Thr Thr Thr Leu Leu Ile Val Phe Phe Thr Val Trp Ile Ile Gly Gly 145 150 155 160

Gly Thr Thr Pro Met Leu Ser Trp Leu Asn Ile Arg Val Gly Val Asp 165 170 175

Pro Asp Gln Asp Pro Pro Pro Asn Asp Ser Phe Gln Val Leu Gln
180 185 190

Gly Asp Gly Pro Asp Ser Ala Arg Gly Asn Arg Thr Lys Gln Glu Ser 195 200 205

Ala Trp Ile Phe Arg Leu Trp Tyr Ser Phe Asp His Asn Tyr Leu Lys 210 215 220

Pro Ile Leu Thr His Ser Gly Pro Pro Leu Thr Thr Leu Pro Ala 225 230 235 240

Trp Cys Gly Leu Leu Ala Arg Cys Leu Thr Ser Pro Gln Val Tyr Asp
245 250 255

Asn Gln Glu Pro Leu Arg Glu Glu Asp Ser Asp Phe Ile Leu Thr Glu 260 265 270

Gly Asp Leu Thr Leu Thr Tyr Gly Asp Ser Thr Val Thr Ala Asn Gly 275 280 285

Ser Ser Ser Ser His Thr Ala Ser Thr Ser Leu Glu Gly Ser Arg Arg 290 295 300

Thr Lys Ser Ser Ser Glu Glu Val Leu Glu Arg Asp Leu Gly Met Gly 305 310 315 320

Asp Gln Lys Val Ser Ser Arg Gly Thr Arg Leu Val Phe Pro Leu Glu 325 330 335

Asp Asn Ala

<210> 2186

<211> 339

<212> PRT

<213> Homo sapiens

<400> 2186

Met Ser Trp Ser Thr Phe Leu Leu Ala Glu Ala Cys Gly Phe Thr Gly 1 5 10 15

Val Val Ala Val Leu Phe Cys Gly Ile Thr Gln Ala His Tyr Thr Tyr  $20 \\ 25 \\ 30$ 

Asn Asn Leu Ser Val Glu Ser Arg Ser Arg Thr Lys Gln Leu Phe Glu 35 40 45

Val Leu His Phe Leu Ala Glu Asn Phe Ile Phe Ser Tyr Met Gly Leu 50 55 60

Ala Leu Phe Thr Phe Gln Lys His Val Phe Ser Pro Ile Phe Ile Ile 65 70 75 80

Gly Ala Phe Val Ala Ile Phe Leu Gly Arg Ala Ala His Ile Tyr Pro\$85\$ 90 95

Leu Ser Phe Phe Leu Asn Leu Gly Arg Arg His Lys Ile Gly Trp Asn 100 105 110

Phe Gln His Met Met Met Phe Ser Gly Leu Arg Gly Ala Met Ala Phe 115 120 125

Ala Leu Ala Ile Arg Asp Thr Ala Ser Tyr Ala Arg Gln Met Met Phe 130 135 140

Thr Thr Thr Leu Leu Ile Val Phe Phe Thr Val Trp Ile Ile Gly Gly 145 150 155 160

Gly Thr Thr Pro Met Leu Ser Trp Leu Asn Ile Arg Val Gly Val Asp 165 170 175

Pro Asp Gln Asp Pro Pro Pro Asn Asn Asp Ser Phe Gln Val Leu Gln 180 185 190

Gly Asp Gly Pro Asp Ser Ala Arg Gly Asn Arg Thr Lys Gln Glu Ser 195 200 205

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Ala Trp Ile Phe Arg Leu Trp Tyr Ser Phe Asp His Asn Tyr Leu Lys
            215
Pro Ile Leu Thr His Ser Gly Pro Pro Leu Thr Thr Thr Leu Pro Ala
                    230
                                        235
Trp Cys Gly Leu Leu Ala Arg Cys Leu Thr Ser Pro Gln Val Tyr Asp
                245
                                    250
Asn Gln Glu Pro Leu Arg Glu Glu Asp Ser Asp Phe Ile Leu Thr Glu
Gly Asp Leu Thr Leu Thr Tyr Gly Asp Ser Thr Val Thr Ala Asn Gly
                            280
Ser Ser Ser Ser His Thr Ala Ser Thr Ser Leu Glu Gly Ser Arg Arg
    290
                        295
Thr Lys Ser Ser Glu Glu Val Leu Glu Arg Asp Leu Gly Met Gly
                    310
                                        315
Asp Gln Lys Val Ser Ser Arg Gly Thr Arg Leu Val Phe Pro Leu Glu
                325
                                   330
Asp Asn Ala
<210> 2187
<211> 509
<212> PRT
<213> Homo sapiens
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<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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- <223> Xaa equals any of the naturally occurring L-amino acids
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<400> 2187
Met Glu Glu Leu Ala Thr Glu Lys Glu Ala Glu Glu Ser His Arg Gln
Asp Ser Val Xaa Leu Leu Thr Phe Ile Leu Leu Thr Leu Thr Ile
             20
                                  25
                                                      3.0
Leu Thr Ile Trp Leu Phe Lys His Arg Arg Val Arg Phe Leu His Glu
Thr Gly Leu Ala Met Ile Tyr Gly Leu Ile Val Gly Val Ile Leu Arg
     50
                          55
                                              60
Tyr Gly Thr Pro Ala Thr Ser Gly Arg Asp Lys Ser Leu Ser Cys Thr
Gln Glu Asp Arg Ala Phe Ser Thr Leu Leu Val Asn Val Ser Gly Lys
                                                          95
Phe Phe Glu Tyr Thr Leu Lys Gly Glu Ile Ser Pro Gly Lys Ile Asn
            100
                                 105
                                                     110
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Ser Val Glu Gln Asn Asp Met Leu Arg Lys Val Thr Phe Asp Pro Glu 120 Val Phe Phe Asn Ile Leu Leu Pro Pro Ile Ile Phe His Ala Gly Tyr 135 Ser Leu Lys Lys Arg His Phe Phe Arg Asn Leu Gly Ser Ile Leu Ala 150 Tyr Ala Phe Leu Gly Thr Ala Xaa Ser Cys Phe Ile Ile Gly Asn Leu Met Tyr Gly Val Val Lys Leu Met Lys Ile Met Gly Gln Leu Ser Asp Lys Phe Tyr Tyr Thr Xaa Xaa Leu Phe Phe Gly Ala Ile Ile Ser Ala 200 Thr Asp Pro Val Thr Val Leu Ala Ile Phe Asn Glu Leu His Ala Asp 215 210 Val Asp Leu Tyr Ala Leu Leu Phe Gly Glu Ser Val Leu Asn Asp Ala 230 235 Val Ala Ile Xaa Leu Xaa Ser Ser Ile Val Ala Tyr Gln Pro Ala Gly 245 250 Leu Asn Thr His Ala Phe Asp Ala Ala Phe Phe Lys Ser Val Gly 265 Ile Phe Leu Gly Ile Phe Ser Gly Ser Phe Thr Met Gly Ala Val Thr Gly Val Val Thr Ala Xaa Val Thr Lys Phe Thr Lys Xaa His Xaa Phe 295 Pro Leu Leu Glu Thr Ala Leu Phe Phe Leu Met Ser Trp Ser Thr Phe 305 310 315 Leu Leu Ala Glu Ala Cys Gly Phe Thr Gly Val Val Ala Val Leu Phe 330 Cys Gly Ile Thr Gln Ala His Tyr Thr Tyr Asn Asn Leu Ser Val Glu 345 Ser Arg Ser Arg Thr Lys Gln Leu Phe Glu Val Leu His Phe Leu Ala 360 Glu Asn Phe Ile Phe Ser Tyr Met Gly Leu Ala Leu Phe Thr Phe Gln Lys His Val Phe Ser Pro Ile Phe Ile Ile Gly Ala Phe Val Ala Ile 390 395 Phe Leu Gly Arg Ala Ala His Ile Tyr Pro Leu Ser Phe Phe Leu Asn Leu Gly Arg Arg His Lys Ile Gly Trp Asn Phe Gln His Met Met Met

425

420

Phe Ser Gly Leu Arg Gly Ala Met Ala Phe Ala Leu Ala Ile Arg Asp 435 440 445

Thr Ala Ser Tyr Ala Arg Gln Met Met Phe Thr Thr Leu Leu Ile 450 455 460

Val Phe Phe Thr Val Trp Ile Ile Gly Gly Gly Thr Thr Pro Met Leu 465 470 475 480

Ser Trp Leu Asn Ile Arg Val Gly Val Asp Pro Asp Xaa Asp Pro Pro 485 490 495

Pro Xaa Xaa Asp Ser Phe Ala Phe Xaa Thr Glu Thr Ala 500 505

<210> 2188

<211> 146

<212> PRT

<213> Homo sapiens

<400> 2188

Met Thr Met Arg Ser Leu Leu Arg Thr Pro Phe Leu Cys Gly Leu Leu 1 5 10 15

Trp Ala Phe Cys Ala Pro Gly Ala Arg Ala Glu Glu Pro Ala Ala Ser 20 25 30

Phe Ser Gln Pro Gly Ser Met Gly Leu Asp Lys Asn Thr Val His Asp 35 40 45

Gln Glu His Ile Met Glu His Leu Glu Gly Val Ile Asn Lys Pro Glu 50 60

Ala Glu Met Ser Pro Gln Glu Leu Gln Leu His Tyr Phe Lys Met His 65 70 75 80

Asp Tyr Asp Gly Asn Asn Leu Leu Asp Gly Leu Glu Leu Ser Thr Ala 85 90 95

Ile Thr His Val His Lys Glu Glu Gly Ser Glu Gln Ala Pro Leu Met 100 105 110

Ser Glu Asp Glu Leu Ile Asn Ile Ile Asp Gly Val Leu Arg Asp Asp 115 120 125

Asp Lys Asn Asn Asp Gly Tyr Ile Asp Tyr Ala Glu Phe Ala Lys Ser 130 135 140

Leu Gln 145

<210> 2189

<211> 530

<212> PRT

<213> Homo sapiens

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<220>
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<222> (488)
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (505)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 2189
Met Glu Phe Gly Leu Thr Trp Val Phe Leu Val Ala Leu Leu Arg Gly
Val His Cys Gln Val Gln Leu Val Glu Ser Gly Gly Ala Val Val Gln
                                 25
Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
Ser Arg Tyr Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
Gln Trp Leu Ala Leu Val Leu His Asp Gly Gln Lys Tyr Asn Glu
                     70
                                         75
Asp Val Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Asn Asn
                                     90
Lys Val Tyr Leu Gln Met Asp Ser Leu Arg Gly Glu Asp Thr Ala Thr
                                105
            100
Tyr Tyr Cys Val Arg Gly Met Trp Glu Gln Leu Pro Ser Tyr Tyr Phe
                            120
Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Pro
    130
                        135
Thr Ser Pro Lys Val Phe Pro Leu Ser Leu Cys Ser Thr Gln Pro Asp
                                        155
Gly Asn Val Val Ile Ala Cys Leu Val Gln Gly Phe Phe Pro Gln Glu
                165
                                    170
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Pro Leu Ser Val Thr Trp Ser Glu Ser Gly Gln Gly Val Thr Ala Arg Asn Phe Pro Pro Ser Gln Asp Ala Ser Gly Asp Leu Tyr Thr Thr Ser Ser Gln Leu Thr Leu Pro Ala Thr Gln Cys Leu Ala Gly Lys Ser Val 215 Thr Cys His Val Lys His Tyr Thr Asn Pro Ser Gln Asp Val Thr Val 235 230 Pro Cys Pro Val Pro Ser Thr Pro Pro Thr Pro Ser Pro Ser Thr Pro 250 Pro Thr Pro Ser Pro Ser Cys Cys His Pro Arg Leu Ser Leu His Arg 265 Pro Ala Leu Glu Asp Leu Leu Gly Ser Glu Ala Asn Leu Thr Cys Thr Leu Thr Gly Leu Arg Asp Ala Ser Gly Val Thr Phe Thr Trp Thr Pro Ser Ser Gly Lys Ser Ala Val Gln Gly Pro Pro Asp Arg Asp Leu 310 315 Cys Gly Cys Tyr Ser Val Ser Ser Val Leu Pro Gly Cys Ala Glu Pro 325 Trp Asn His Gly Lys Thr Phe Thr Cys Thr Ala Ala Tyr Pro Glu Ser 345 Lys Thr Pro Leu Thr Ala Thr Leu Ser Lys Ser Gly Asn Thr Phe Arg Pro Glu Val His Leu Leu Pro Pro Pro Ser Glu Glu Leu Ala Leu Asn 375 Glu Leu Val Thr Leu Thr Cys Leu Ala Arg Gly Phe Ser Pro Lys Asp 390 Val Leu Val Arg Trp Leu Gln Gly Ser Gln Glu Leu Pro Arg Glu Lys 410 Tyr Leu Thr Trp Ala Ser Arg Gln Glu Pro Ser Gln Gly Thr Thr Phe Ala Val Thr Ser Ile Leu Arg Val Ala Ala Glu Asp Trp Lys Lys 440 Gly Asp Thr Phe Ser Cys Met Val Gly His Glu Ala Leu Pro Leu Ala 450 455 Phe Thr Gln Lys Thr Ile Asp Arg Leu Ala Gly Lys Pro Thr His Val 470 475

490

Asn Val Ser Val Val Met Ala Xaa Val Xaa Gly Pro Cys Xaa Xaa Ala

485

Ala Arg Leu Ser Pro Pro Leu Asn Xaa Leu His Ala Pro Pro Lys Lys

Lys Lys 530

<210> 2190

<211> 265

<212> PRT

<213> Homo sapiens

<400> 2190

Met Gly Gly Gln Val Ala Gly Val Tyr Ala Ala Tyr Tyr Pro Ser Asp 1 10 15

Val Ser Ser Leu Cys Leu Val Cys Pro Ala Gly Leu Gln Tyr Ser Thr 20 25 30

Asp Asn Gln Phe Val Gln Arg Leu Lys Glu Leu Gln Gly Ser Ala Ala 35 40 45

Val Glu Lys Ile Pro Leu Ile Pro Ser Thr Pro Glu Glu Met Ser Glu
50 55 60

Met Leu Gln Leu Cys Ser Tyr Val Arg Phe Lys Val Pro Gln Gln Ile 65 70 75 80

Leu Gln Gly Leu Val Asp Val Arg Ile Pro His Asn Asn Phe Tyr Arg 85 90 95

Lys Leu Phe Leu Glu Ile Val Ser Glu Lys Ser Arg Tyr Ser Leu His 100 105 110

Gln Asn Met Asp Lys Ile Lys Val Pro Thr Gln Ile Ile Trp Gly Lys
115 120 125

Gln Asp Ala Gly Ala Gly Cys Val Trp Gly Arg His Val Gly Gln Val 130 135 140

Asn Cys Gln Leu Pro Gly Gly Ala Ser Gly Lys Leu Trp Ala Leu Ser 145 150 155 160

Ser Asp Gly Lys Thr Gln Glu Asp Ser Gln Ala His Asn Arg Leu Phe 165 170 175

Ser Phe Cys Ala Gln His Arg Gln Gln Gln Glu Ala Gly Leu Arg Pro 180 185 190

Arg Leu Gln Pro Ala Phe Cys Thr Gln His Leu Leu Pro Ser Pro Lys
195 200 205

Ser Asp Ala Ala Thr Thr Leu Arg Asp Pro Ala Pro Asn Ala Val Gly 210 215 220

Ala Pro Val Thr Leu Arg Lys Pro Val Pro Tyr Pro Trp Tyr Pro Arg

235

Phe Pro Arg Ala Leu Gly Thr Thr Arg Lys Pro Pro Arg Tyr Phe Ser 245 250 255

Gln Asn Arg Asn Ser Tyr Gly Thr Lys 260 265

<210> 2191

<211> 99

<212> PRT

<213> Homo sapiens

<400> 2191

T.

Met Ala Val Trp Gly Asp Thr Glu Leu Ala Ala Gly Val Phe Cys Phe 1 5 10 15

Phe Leu Phe Phe Cys Phe Leu Tyr Leu Ser Gly Thr Trp Asn Ala Ser

Lys Thr Glu Leu Phe Thr Pro Leu Glu Arg Glu Leu Lys Pro Gly His
35 40 45

Pro Ser Gly Met Leu Ser Gly Ser His Pro His Gly Ala Gln Gln Ala 50 55 60

Lys Ser Thr Gly Leu Lys Leu Ser Leu Pro Ala Gln Gln Ser Glu Val 65 70 75 80

Asp Leu Gly Cys Ser Ser Leu Val Trp Gly Gly Ala Ser Ala Ile Thr 85 90 95

Glu Ala Leu

<210> 2192

<211> 144

<212> PRT

<213> Homo sapiens

<400> 2192

Thr Gly Leu Lys Pro Thr Val Ala Leu Cys Gln Gln Lys Cys Arg Arg 20 25 30

Thr Gly Thr Leu Glu Gly Asn Tyr Cys Ser Ser Asp Phe Val Leu Ala 35 40 45

Gly Thr Val Ile Thr Thr Ile Thr Arg Asp Gly Ser Leu His Ala Thr 50 60

Val Ser Ile Ile Asn Ile Tyr Lys Glu Gly Asn Leu Ala Ile Gln Gln 65 70 75 80

- Ala Gly Lys Asn Met Ser Ala Arg Leu Thr Val Val Cys Lys Gln Cys 85 90 95
- Pro Leu Leu Arg Arg Gly Leu Asn Tyr Ile Ile Met Gly Gln Val Gly
  100 105 110
- Glu Asp Gly Arg Gly Lys Ile Met Pro Asn Ser Phe Ile Met Met Phe 115 120 125
- Lys Thr Lys Asn Gln Lys Leu Leu Asp Ala Leu Lys Asn Lys Gln Cys 130 135 140
- <210> 2193
- <211> 294
- <212> PRT
- <213> Homo sapiens
- <220>
- <221> SITE
- <222> (93)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <220>
- <221> SITE
- <222> (97)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <400> 2193
- Met Met Val Gln Met Ile Ser Asp Ala Asn Thr Ala Gly Asn Gly Phe 1 5 10 15
- Met Ala Met Phe Ser Ala Ala Glu Pro As<br/>n Glu Arg Gly Asp Gl<br/>n Tyr 20  $\phantom{000}25\phantom{0}$ 30
- Cys Gly Gly Leu Leu Asp Arg Pro Ser Gly Ser Phe Lys Thr Pro Asn 35 40 45
- Trp Pro Asp Arg Asp Tyr Pro Ala Gly Val Thr Cys Val Trp His Ile 50 55 60
- Val Ala Pro Lys Asn Gln Leu Ile Glu Leu Lys Phe Glu Lys Phe Asp 65 70 75 80
- Val Glu Arg Asp Asn Tyr Cys Arg Tyr Asp Tyr Val Xaa Val Phe Asn 85 90 95
- Xaa Gly Glu Val Asn Asp Ala Arg Arg Ile Gly Lys Tyr Cys Gly Asp
  100 105 110
- Ser Pro Pro Ala Pro Ile Val Ser Glu Arg Asn Glu Leu Leu Ile Gln
  115 120 125
- Phe Leu Ser Asp Leu Ser Leu Thr Ala Asp Gly Phe Ile Gly His Tyr 130 135 140

Ile Phe Arg Pro Lys Lys Leu Pro Thr Thr Thr Glu Gln Pro Val Thr 145 150 155 160

Thr Thr Phe Pro Val Thr Thr Gly Leu Lys Pro Thr Val Ala Leu Cys 165 170 175

Gln Gln Lys Cys Arg Arg Thr Gly Thr Leu Glu Gly Asn Tyr Cys Ser 180 185 190

Ser Asp Phe Val Leu Ala Gly Thr Val Ile Thr Thr Ile Thr Arg Asp 195 200 205

Gly Ser Leu His Ala Thr Val Ser Ile Ile Asn Ile Tyr Lys Glu Gly 210 220

Asn Leu Ala Ile Gln Gln Ala Gly Lys Asn Met Ser Ala Arg Leu Thr 225 230 235 240

Val Val Cys Lys Gln Cys Pro Leu Leu Arg Arg Gly Leu Asn Tyr Ile 245 250 255

Ile Met Gly Gl<br/>n Val Gly Glu Asp Gly Arg Gly Lys Ile Met Pro As<br/>n 260 265 270

Ser Phe Ile Met Met Phe Lys Thr Lys Asn Gln Lys Leu Leu Asp Ala 275 280 285

Leu Lys Asn Lys Gln Cys 290

<210> 2194

<211> 487

<212> PRT

<213> Homo sapiens

<400> 2194

Met Lys His Leu Trp Phe Phe Leu Leu Leu Val Ala Ala Pro Arg Trp
1 5 10 15

Val Leu Ser Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys 20 25 30

Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Ser Ser Gly Gly His Tyr Trp Ser Trp Ile Arg Gln His Pro Gly Lys 50 55 60

Gly Leu Glu Trp Ile Gly Tyr Ile Ser Tyr Asn Gly Val Thr Tyr Tyr 65 70 75 80

Asn Pro Ser Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Gln

Asn Gln Phe Ser Leu Arg Leu Ser Ser Val Thr Ala Ala Asp Thr Ala 100 105 110

Val Tyr Tyr Cys Ala Lys Asp His Arg Ala Thr Arg Asp Gly Tyr Gln

115 120 125

Leu	Glu 130	Tyr	Arg	Gly	Phe	Asp 135	Tyr	Trp	Gly	Gln	Gly 140	Ile	Leu	Val	Thr
Val 145	Ser	Ser	Ala	Ser	Pro 150	Thr	Ser	Pro	Lys	Val 155	Phe	Pro	Leu	Ser	Leu 160
Asp	Ser	Thr	Pro	Gln 165	Asp	Gly	Asn	Val	Val 170	Val	Ala	Cys	Leu	Val 175	Gln
Gly	Phe	Phe	Pro 180	Gln	Glu	Pro	Leu	Ser 185	Val	Thr	Trp	Ser	Glu 190	Ser	Gly
Gln	Asn	Val 195	Thr	Ala	Arg	Asn	Phe 200	Pro	Pro	Ser	Gln	Asp 205	Ala	Ser	Gly
Asp	Leu 210	Tyr	Thr	Thr	Ser	Ser 215	Gln	Leu	Thr	Leu	Pro 220	Ala	Thr	Gln	Cys
Pro 225	Asp	Gly	Lys	Ser	Val 230	Thr	Cys	His	Val	Lys 235	His	Tyr	Thr	Asn	Pro 240
Ser	Gln	Asp	Val	Thr 245	Val	Pro	Cys	Pro	Val 250	Pro	Pro	Pro	Pro	Pro 255	Cys
Cys	His	Pro	Arg 260	Leu	Ser	Leu	His	Arg 265	Pro	Ala	Leu	Glu	Asp 270	Leu	Leu
Leu	Gly	Ser 275	Glu	Ala	Asn	Leu	Thr 280	Cys	Thr	Leu	Thr	Gly 285	Leu	Arg	Asp
Ala	Ser 290	Gly	Ala	Thr	Phe	Thr 295	Trp	Thr	Pro	Ser	Ser 300	Gly	Lys	Ser	Ala
Val 305	Gln	Gly	Pro	Pro	Glu 310	Arg	Asp	Leu	Cys	Gly 315	Cys	Tyr	Ser	Val	Ser 320
Ser	Val	Leu	Pro	Gly 325	Cys	Ala	Gln	Pro	Trp 330	Asn	His	Gly	Glu	Thr 335	Phe
Thr	Cys	Thr	Ala 340	Ala	His	Pro	Glu	Leu 345	Lys	Thr	Pro	Leu	Thr 350	Ala	Asn
Ile	Thr	Lys 355	Ser	Gly	Asn	Thr	Phe 360	Arg	Pro	Glu	Val	His 365	Leu	Leu	Pro
Pro	Pro 370	Ser	Glu	Glu	Leu	Ala 375	Leu	Asn	Glu	Leu	Val 380	Thr	Leu	Thr	Cys
Leu 385	Ala	Arg	Gly	Phe	Ser 390	Pro	Lys	Asp	Val	Leu 395	Val	Arg	Trp	Leu	Gln 400
Gly	Ser	Gln	Glu	Leu 405		Arg	Glu	Lys	Tyr 410		Thr	Trp	Ala	Ser 415	
Gln	Glu	Pro	Ser 420	Gln	Gly	Thr	Thr	Thr 425		Ala	Val	Thr	Ser 430		Leu
Arg	Val	Ala	Ala	Glu	Asp	Trp	Lys		Gly L455	· Asp	Thr	Phe	Ser	Cys	Met

435 440 445

Val Gly His Glu Ala Leu Pro Leu Ala Phe Thr Gln Lys Thr Ile Asp 450 455 460

Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val Val Met Ala 465 470 475 480

Glu Val Asp Gly Thr Cys Tyr 485

<210> 2195

<211> 189

<212> PRT

<213> Homo sapiens

<400> 2195

Met Gly Gly Gln Val Ala Gly Val Tyr Ala Ala Tyr Tyr Pro Ser Asp 1 10 15

Val Ser Ser Leu Cys Leu Val Cys Pro Ala Gly Leu Gln Tyr Ser Thr
20 25 30

Asp Asn Gln Phe Val Gln Arg Leu Lys Glu Leu Gln Gly Ser Ala Ala 35 40 45

Val Glu Lys Ile Pro Leu Ile Pro Ser Thr Pro Glu Glu Met Ser Glu
50 55 60

Met Leu Gln Leu Cys Ser Tyr Val Arg Phe Lys Val Pro Gln Gln Ile 65 70 75 80

Leu Gln Gly Leu Val Asp Val Arg Ile Pro His Asn Asn Phe Tyr Arg 85 90 95

Lys Leu Phe Leu Glu Ile Val Ser Glu Lys Ser Arg Tyr Ser Leu His 100 105 110

Gln Asn Met Asp Lys Ile Lys Val Pro Thr Gln Ile Ile Trp Gly Lys 115 120 125

Gln Asp Gln Val Leu Asp Val Ser Gly Ala Asp Met Leu Ala Lys Ser 130 135 140

Ile Ala Asn Cys Gln Val Glu Leu Leu Glu Asn Cys Gly His Ser Val
145 150 155 160

Val Met Glu Arg Pro Arg Lys Thr Ala Lys Leu Ile Ile Asp Phe Leu 165 170 175

Ala Ser Val His Asn Thr Asp Asn Asn Lys Lys Leu Asp 180 185

<210> 2196

<211> 298

<212> PRT

<213> Homo sapiens

<400> 2196

Met Lys Thr Leu Gln Ser Thr Leu Leu Leu Leu Leu Leu Val Pro Leu
1 10 15

Ile Lys Pro Ala Pro Pro Thr Gln Gln Asp Ser Arg Ile Ile Tyr Asp 20 25 30

Tyr Gly Thr Asp Asn Phe Glu Glu Ser Ile Phe Ser Gln Asp Tyr Glu 35 40 45

Asp Lys Tyr Leu Asp Gly Lys Asn Ile Lys Glu Lys Glu Thr Val Ile 50 55 60

Ile Pro Asn Glu Lys Ser Leu Gln Leu Gln Lys Asp Glu Ala Ile Thr 65 70 75 80

Pro Leu Pro Pro Lys Lys Glu Asn Asp Glu Met Pro Thr Cys Leu Leu 85 90 95

Cys Val Cys Leu Ser Gly Ser Val Tyr Cys Glu Glu Val Asp Ile Asp 100 105 110

Ala Val Pro Pro Leu Pro Lys Glu Ser Ala Tyr Leu Tyr Ala Arg Phe 115 120 125

Leu Arg Arg Leu Asp Phe Thr Gly Asn Leu Ile Glu Asp Ile Glu Asp 145 150 155 160

Gly Thr Phe Ser Lys Leu Ser Leu Leu Glu Glu Leu Ser Leu Ala Glu 165 170 175

Asn Gln Leu Leu Lys Leu Pro Val Leu Pro Pro Lys Leu Thr Leu Phe 180 185 190

Asn Ala Lys Tyr Asn Lys Ile Lys Ser Arg Gly Ile Lys Ala Asn Ala 195 200 205

Phe Lys Lys Leu Asn Asn Leu Thr Phe Leu Tyr Leu Asp His Asn Ala 210 215 220

Leu Glu Ser Val Pro Leu Asn Leu Pro Glu Ser Leu Arg Val Ile His 225 230 235 240

Leu Gln Phe Asn Asn Ile Ala Ser Ile Thr Asp Asp Thr Phe Cys Lys 245 250 255

Ala Asn Asp Thr Ser Tyr Ile Arg Asp Arg Ile Glu Glu Ile Arg Leu 260 265 270

Glu Gly Asn Pro Ile Val Leu Gly Lys His Pro Asn Ser Phe Ile Cys 275 280 285

Leu Lys Arg Leu Pro Ile Gly Ser Tyr Phe 290 295 <210> 2197

<211> 298

<212> PRT

<213> Homo sapiens

<400> 2197

Met Lys Thr Leu Gln Ser Thr Leu Leu Leu Leu Leu Leu Val Pro Leu
1 5 10 15

Ile Lys Pro Ala Pro Pro Thr Gln Gln Asp Ser Arg Ile Ile Tyr Asp 20 25 30

Tyr Gly Thr Asp Asn Phe Glu Glu Ser Ile Phe Ser Gln Asp Tyr Glu 35 40 45

Asp Lys Tyr Leu Asp Gly Lys Asn Ile Lys Glu Lys Glu Thr Val Ile 50 60

Ile Pro Asn Glu Lys Ser Leu Gln Leu Gln Lys Asp Glu Ala Ile Thr 65 70 75 80

Pro Leu Pro Pro Lys Lys Glu Asn Asp Glu Met Pro Thr Cys Leu Leu 85 90 95

Cys Val Cys Leu Ser Gly Ser Val Tyr Cys Glu Glu Val Asp Ile Asp 100 105 110

Ala Val Pro Pro Leu Pro Lys Glu Ser Ala Tyr Leu Tyr Ala Arg Phe 115 120 125

Asn Lys Ile Lys Lys Leu Thr Ala Lys Asp Phe Ala Asp Ile Pro Asn 130 135 140

Leu Arg Arg Leu Asp Phe Thr Gly Asn Leu Ile Glu Asp Ile Glu Asp 145 150 155 160

Gly Thr Phe Ser Lys Leu Ser Leu Leu Glu Glu Leu Ser Leu Ala Glu
165 170 175

Asn Gln Leu Leu Lys Leu Pro Val Leu Pro Pro Lys Leu Thr Leu Phe 180 185 190

Asn Ala Lys Tyr Asn Lys Ile Lys Ser Arg Gly Ile Lys Ala Asn Ala 195 200 205

Phe Lys Lys Leu Asn Asn Leu Thr Phe Leu Tyr Leu Asp His Asn Ala 210 215 220

Leu Glu Ser Val Pro Leu Asn Leu Pro Glu Ser Leu Arg Val Ile His 225 230 235 240

Leu Gln Phe Asn Asn Ile Ala Ser Ile Thr Asp Asp Thr Phe Cys Lys
245 250 255

Ala Asn Asp Thr Ser Tyr Ile Arg Asp Arg Ile Glu Glu Ile Arg Leu 260 265 270

Glu Gly Asn Pro Ile Val Leu Gly Lys His Pro Asn Ser Phe Ile Cys

275 280 285

Leu Lys Arg Leu Pro Ile Gly Ser Tyr Phe 290 295

<210> 2198

<211> 42

<212> PRT

<213> Homo sapiens

<400> 2198

Met Glu Cys Lys Lys Arg Ile Gln Leu Ile Met Leu Ala Ser Ile Val 1 5 15

Arg Leu Pro Pro Thr Glu Gln Ser Gly Leu Leu Lys Thr Arg Phe His 20 25 30

Asn Phe Cys Gln Arg Asn Leu Gln Ser Ser 35

<210> 2199

<211> 472

<212> PRT

<213> Homo sapiens

<400> 2199

Met Ile Arg Thr Arg Arg Gly Trp Ser Ser Met Trp Pro Trp Ile Gly
1 5 10 15

Val Gly Tyr Leu Ala Gly Cys Leu Val His Ala Leu Gly Glu Lys Gl<br/>n 20  $\phantom{-}25\phantom{+}30\phantom{+}$ 

Pro Glu Leu Gln Ile Ser Glu Arg Asp Val Leu Cys Val Gln Ile Ala 35 40 45

Gly Leu Cys His Asp Leu Gly His Gly Pro Phe Ser His Met Phe Asp 50 55 60

Gly Arg Phe Ile Pro Leu Ala Arg Pro Glu Val Lys Trp Thr His Glu 65 70 75 80

Gln Gly Ser Val Met Met Phe Glu His Leu Ile Asn Ser Asn Gly Ile 85 90 95

Lys Pro Val Met Glu Gln Tyr Gly Leu Ile Pro Glu Glu Asp Ile Cys 100 105 110

Phe Ile Lys Glu Gln Ile Val Gly Pro Leu Glu Ser Pro Val Glu Asp 115 120 125

Ser Leu Trp Pro Tyr Lys Gly Arg Pro Glu Asn Lys Ser Phe Leu Tyr 130 135 140

Glu Ile Val Ser Asn Lys Arg Asn Gly Ile Asp Val Asp Lys Trp Asp 145 150 155 160

Tyr Phe Ala Arg Asp Cys His His Leu Gly Ile Gln Asn Asn Phe Asp 170 Tyr Lys Arg Phe Ile Lys Phe Ala Arg Val Cys Glu Val Asp Asn Glu 185 Leu Arg Ile Cys Ala Arg Asp Lys Glu Val Gly Asn Leu Tyr Asp Met 200 Phe His Thr Arg Asn Ser Leu His Arg Arg Ala Tyr Gln His Lys Val 215 Gly Asn Ile Ile Asp Thr Met Ile Thr Asp Ala Phe Leu Glu Ala Asp 235 230 Asp Tyr Ile Glu Ile Thr Gly Ala Gly Gly Lys Lys Tyr Arg Ile Ser Thr Ala Ile Asp Asp Met Glu Ala Tyr Thr Lys Leu Thr Asp Asn Ile 265 Phe Leu Glu Ile Leu Tyr Ser Thr Asp Pro Lys Leu Lys Asp Ala Arg 280 Glu Ile Leu Lys Gln Ile Glu Tyr Arg Asn Leu Phe Lys Tyr Val Gly 295 Glu Thr Gln Pro Thr Gly Gln Ile Lys Ile Lys Arg Glu Asp Tyr Glu 310 Ser Leu Pro Lys Glu Val Ala Ser Ala Lys Pro Lys Val Leu Leu Asp 330 Val Lys Leu Lys Ala Glu Asp Phe Ile Val Asp Val Ile Asn Met Asp 345 Tyr Gly Met Gln Glu Lys Asn Pro Ile Asp His Val Ser Phe Tyr Cys 360 Lys Thr Ala Pro Asn Arg Ala Ile Arg Ile Thr Lys Asn Gln Val Ser 375 Gln Leu Leu Pro Glu Lys Phe Ala Glu Gln Leu Ile Arg Val Tyr Cys 395 Lys Lys Val Asp Arg Lys Ser Leu Tyr Ala Ala Arg Gln Tyr Phe Val Gln Trp Cys Ala Asp Arg Asn Phe Thr Lys Pro Gln Asp Gly Asp Val 425 Ile Ala Pro Leu Ile Thr Pro Gln Lys Lys Glu Trp Asn Asp Ser Thr Ser Val Gln Asn Pro Thr Arg Leu Arg Glu Ala Ser Lys Ser Arg Val

Gln Leu Phe Lys Asp Asp Pro Met 465 470

455

460

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<210> 2200
<211> 626
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (353)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (354)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (363)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 2200
Met Gln Arg Ala Asp Ser Glu Gln Pro Ser Lys Arg Pro Arg Cys Asp
Asp Ser Pro Arg Thr Pro Ser Asn Thr Pro Ser Ala Glu Ala Asp Trp
Ser Pro Gly Leu Glu Leu His Pro Asp Tyr Lys Thr Trp Gly Pro Glu
         35
Gln Val Cys Ser Phe Leu Arg Arg Gly Gly Phe Glu Glu Pro Val Leu
Leu Lys Asn Ile Arg Glu Asn Glu Ile Thr Gly Ala Leu Leu Pro Cys
 65
Leu Asp Glu Ser Arg Phe Glu Asn Leu Gly Val Ser Ser Leu Gly Glu
Arg Lys Lys Leu Leu Ser Tyr Ile Gln Arg Leu Val Gln Ile His Val
Asp Thr Met Lys Val Ile Asn Asp Pro Ile His Gly His Ile Glu Leu
His Pro Leu Leu Val Arg Ile Ile Asp Thr Pro Gln Phe Gln Arg Leu
    130
Arg Tyr Ile Lys Gln Leu Gly Gly Gly Tyr Tyr Val Phe Pro Gly Ala
                                         155
Ser His Asn Arg Phe Glu His Ser Leu Gly Val Gly Tyr Leu Ala Gly
Cys Leu Val His Ala Leu Gly Glu Lys Gln Pro Glu Leu Gln Ile Ser
Glu Arg Asp Val Leu Cys Val Gln Ile Ala Gly Leu Cys His Asp Leu
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1461

195 200 205

Gly His Gly Pro Phe Ser His Met Phe Asp Gly Arg Phe Ile Pro Leu 215 Ala Arg Pro Glu Val Lys Trp Thr His Glu Gln Gly Ser Val Met Met 235 230 Phe Glu His Leu Ile Asn Ser Asn Gly Ile Lys Pro Val Met Glu Gln 250 Tyr Gly Leu Ile Pro Glu Glu Asp Ile Cys Phe Ile Lys Glu Gln Ile Val Gly Pro Leu Glu Ser Pro Val Glu Asp Ser Leu Trp Pro Tyr Lys 280 Gly Arg Pro Glu Asn Lys Ser Phe Leu Tyr Glu Ile Val Ser Asn Lys 295 Arg Asn Gly Ile Asp Val Asp Lys Trp Asp Tyr Phe Ala Arg Asp Cys 315 310 His His Leu Gly Ile Gln Asn Asn Phe Asp Tyr Lys Arg Phe Ile Lys 325 Phe Ala Arg Val Cys Glu Val Asp Asn Glu Leu Arg Ile Cys Ala Arg 345 Xaa Xaa Glu Val Gly Asn Leu Tyr Asp Met Xaa His Thr Arg Asn Ser Leu His Arg Arg Ala Tyr Gln His Lys Val Gly Asn Ile Ile Asp Thr 375 Met Ile Thr Asp Ala Phe Leu Lys Ala Asp Asp Tyr Ile Glu Ile Thr Gly Ala Gly Gly Lys Lys Tyr Arg Ile Ser Thr Ala Ile Asp Asp Met 410 Glu Ala Tyr Thr Lys Leu Thr Asp Asn Ile Phe Leu Glu Ile Leu Tyr 425 Ser Thr Asp Pro Lys Leu Lys Asp Ala Arg Glu Ile Leu Lys Gln Ile 440 Glu Tyr Arg Asn Leu Phe Lys Tyr Val Gly Glu Thr Gln Pro Thr Gly 450 Gln Ile Lys Ile Lys Arg Glu Asp Tyr Glu Ser Leu Pro Lys Glu Val 475 Ala Ser Ala Lys Pro Lys Val Leu Leu Asp Val Lys Leu Lys Ala Glu Asp Phe Ile Val Asp Val Ile Asn Met Asp Tyr Gly Met Gln Glu Lys 505 Asn Pro Ile Asp His Val Ser Phe Tyr Cys Lys Thr Ala Pro Asn Arg 515 520 525

Ala Ile Arg Ile Thr Lys Asn Gln Val Ser Gln Leu Leu Pro Glu Lys 530 540

Phe Ala Glu Gln Leu Ile Arg Val Tyr Cys Lys Lys Val Asp Arg Lys 545 550 555 560

Ser Leu Tyr Ala Ala Arg Gln Tyr Phe Val Gln Trp Cys Ala Asp Arg 565 570 575

Asn Phe Thr Lys Pro Gln Asp Gly Asp Val Ile Ala Pro Leu Ile Thr 580 585 590

Pro Gln Lys Lys Glu Trp Asn Asp Ser Thr Ser Val Gln Asn Pro Thr 595 600 605

Arg Leu Arg Glu Ala Ser Lys Ser Arg Val Gln Leu Phe Lys Asp Asp 610 615 620

Pro Met 625

<210> 2201

<211> 245

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (128)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 2201

Met Glu Gly Pro Arg Gly Trp Leu Val Leu Cys Val Leu Ala Ile Ser 1 5 10 15

Leu Ala Ser Met Val Thr Glu Asp Leu Cys Arg Ala Pro Asp Gly Lys 20 25 30

Lys Gly Glu Ala Gly Arg Pro Gly Arg Arg Gly Arg Pro Gly Leu Lys 35 40 45

Gly Glu Gln Gly Glu Pro Gly Ala Pro Gly Ile Arg Thr Gly Ile Gln 50 55 60

Gly Leu Lys Gly Asp Gln Gly Glu Pro Gly Pro Ser Gly Asn Pro Gly 65 70 75 80

Lys Val Gly Tyr Pro Gly Pro Ser Gly Pro Leu Gly Ala Arg Gly Ile 85 90 95

Pro Gly Ile Lys Gly Thr Lys Gly Ser Pro Gly Asn Ile Lys Asp Gln 100 105 110

Pro Arg Pro Ala Phe Ser Ala Ile Arg Arg Asn Pro Pro Met Gly Xaa 115 120 125

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Asn Val Val Ile Phe Asp Thr Val Ile Thr Asn Gln Glu Glu Pro Tyr 130 135 140
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Gln Asn His Ser Gly Arg Phe Val Cys Thr Val Pro Gly Tyr Tyr Tyr 145 150 155 160

Phe Thr Phe Gln Val Leu Ser Gln Trp Glu Ile Cys Leu Ser Ile Val 165 170 175

Ser Ser Ser Arg Gly Gln Val Arg Arg Ser Leu Gly Phe Cys Asp Thr

Thr Asn Lys Gly Leu Phe Gln Val Val Ser Gly Gly Met Val Leu Gln 195 200 205

Leu Gln Gln Gly Asp Gln Val Trp Val Glu Lys Asp Pro Lys Lys Gly 210 215 220

His Ile Tyr Gln Gly Ser Glu Ala Asp Ser Val Phe Ser Gly Phe Leu 225 230 235 240

Ile Phe Pro Ser Ala 245

<210> 2202

<211> 32

<212> PRT

<213> Homo sapiens

<400> 2202

Met Gly Val Asn Lys Val Leu Phe Thr Phe Phe Phe Phe Ser Ser Leu  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Leu Asp Gly Val Gly Thr Ser His Ser Leu Ala Ser Phe Pro His Thr 20 25 30

<210> 2203

<211> 245

<212> PRT

<213> Homo sapiens

<400> 2203

Met Glu Gly Pro Arg Gly Trp Leu Val Leu Cys Val Leu Ala Ile Ser 1 5 10 15

Leu Ala Ser Met Val Thr Glu Asp Leu Cys Arg Ala Pro Asp Gly Lys 20 25 30

Lys Gly Glu Ala Gly Arg Pro Gly Arg Arg Gly Arg Pro Gly Leu Lys 35 40 45

Gly Glu Gln Gly Glu Pro Gly Ala Pro Gly Ile Arg Thr Gly Ile Gln 50 55 60

Gly Leu Lys Gly Asp Gln Gly Glu Pro Gly Pro Ser Gly Asn Pro Gly 65 70 75 80

Lys Val Gly Tyr Pro Gly Pro Ser Gly Pro Leu Gly Ala Arg Gly Ile \$85\$ 90 95

Pro Gly Ile Lys Gly Thr Lys Gly Ser Pro Gly Asn Ile Lys Asp Gln 100 105 110

Pro Arg Pro Ala Phe Ser Ala Ile Arg Arg Asn Pro Pro Met Gly Gly 115 120 125

Asn Val Val Ile Phe Asp Thr Val Ile Thr Asn Gln Glu Glu Pro Tyr 130 135 140

Gln Asn His Ser Gly Arg Phe Val Cys Thr Val Pro Gly Tyr Tyr Tyr 145 150 155 160

Phe Thr Phe Gln Val Leu Ser Gln Trp Glu Ile Cys Leu Ser Ile Val 165 170 175

Ser Ser Ser Arg Gly Gln Val Arg Arg Ser Leu Gly Phe Cys Asp Thr 180 185 190

Thr Asn Lys Gly Leu Phe Gln Val Val Ser Gly Gly Met Val Leu Gln
195 200 205

Leu Gln Gln Gly Asp Gln Val Trp Val Glu Lys Asp Pro Lys Lys Gly 210 215 220

His Ile Tyr Gln Gly Ser Glu Ala Asp Ser Val Phe Ser Gly Phe Leu 225 230 235 240

Ile Phe Pro Ser Ala 245

<210> 2204

<211> 245

<212> PRT

<213> Homo sapiens

<400> 2204

Met Glu Gly Pro Arg Gly Trp Leu Val Leu Cys Val Leu Ala Ile Ser 1 5 10 15

Leu Ala Ser Met Val Thr Glu Asp Leu Cys Arg Ala Pro Asp Gly Lys
20 25 30

Lys Gly Glu Ala Gly Arg Pro Gly Arg Arg Gly Arg Pro Gly Leu Lys 35 40 45

Gly Glu Gln Gly Glu Pro Gly Ala Pro Gly Ile Arg Thr Gly Ile Gln
50 55 60

Gly Leu Lys Gly Asp Gln Gly Glu Pro Gly Pro Ser Gly Asn Pro Gly 65 70 75 80

Lys Val Gly Tyr Pro Gly Pro Ser Gly Pro Leu Gly Ala Arg Gly Ile 85 90 95

Pro Gly Ile Lys Gly Thr Lys Gly Ser Pro Gly Asn Ile Lys Asp Gln  $100 \,$   $105 \,$   $110 \,$ 

Pro Arg Pro Ala Phe Ser Ala Ile Arg Arg Asn Pro Pro Met Gly Gly
115 120 125

Asn Val Val Ile Phe Asp Thr Val Ile Thr Asn Gln Glu Glu Pro Tyr 130 135 140

Gln Asn His Ser Gly Arg Phe Val Cys Thr Val Pro Gly Tyr Tyr Tyr 145 150 155 160

Phe Thr Phe Gln Val Leu Ser Gln Trp Glu Ile Cys Leu Ser Ile Val 165 170 175

Ser Ser Ser Arg Gly Gln Val Arg Arg Ser Leu Gly Phe Cys Asp Thr

Thr Asn Lys Gly Leu Phe Gln Val Val Ser Gly Gly Met Val Leu Gln
195 200 205

Leu Gln Gln Gly Asp Gln Val Trp Val Glu Lys Asp Pro Lys Lys Gly 210 215 220

His Ile Tyr Gln Gly Ser Glu Ala Asp Ser Val Phe Ser Gly Phe Leu 225 230 235 240

Ile Phe Pro Ser Ala

<210> 2205

<211> 245

<212> PRT

<213> Homo sapiens

<400> 2205

Met Glu Gly Pro Arg Gly Trp Leu Val Leu Cys Val Leu Ala Ile Ser 1 5 10 15

Leu Ala Ser Met Val Thr Glu Asp Leu Cys Arg Ala Pro Asp Gly Lys 20 25 30

Lys Gly Glu Ala Gly Arg Pro Gly Arg Gly Arg Pro Gly Leu Lys 35 40 45

Gly Glu Gln Gly Glu Pro Gly Ala Pro Gly Ile Arg Thr Gly Ile Gln
50 55 60

Gly Leu Lys Gly Asp Gln Gly Glu Pro Gly Pro Ser Gly Asn Pro Gly 65 70 75 80

Lys Val Gly Tyr Pro Gly Pro Ser Gly Pro Leu Gly Ala Arg Gly Ile 85 90 95

Pro Gly Ile Lys Gly Thr Lys Gly Ser Pro Gly Asn Ile Lys Asp Gln

1466

100 105 110

Pro Arg Pro Ala Phe Ser Ala Ile Arg Arg Asn Pro Pro Met Gly Gly 115 120 125

Asn Val Val Ile Phe Asp Thr Val Ile Thr Asn Gln Glu Glu Pro Tyr 130 135 140

Gln Asn His Ser Gly Arg Phe Val Cys Thr Val Pro Gly Tyr Tyr Tyr 145 150 155 160

Phe Thr Phe Gln Val Leu Ser Gln Trp Glu Ile Cys Leu Ser Ile Val 165 170 175

Ser Ser Ser Arg Gly Gln Val Arg Arg Ser Leu Gly Phe Cys Asp Thr 180 185 190

Thr Asn Lys Gly Leu Phe Gln Val Val Ser Gly Gly Met Val Leu Gln 195 200 205

Leu Gln Gln Gly Asp Gln Val Trp Val Glu Lys Asp Pro Lys Lys Gly 210 215 220

His Ile Tyr Gln Gly Ser Glu Ala Asp Ser Val Phe Ser Gly Phe Leu 225 230 235 240

Ile Phe Pro Ser Ala 245

<210> 2206

<211> 245

<212> PRT

<213> Homo sapiens

<400> 2206

Met Glu Gly Pro Arg Gly Trp Leu Val Leu Cys Val Leu Ala Ile Ser 1 5 10 15

Leu Ala Ser Met Val Thr Glu Asp Leu Cys Arg Ala Pro Asp Gly Lys 20 25 30

Lys Gly Glu Ala Gly Arg Pro Gly Arg Arg Gly Arg Pro Gly Leu Lys 35 40 45

Gly Glu Gln Gly Glu Pro Gly Ala Pro Gly Ile Arg Thr Gly Ile Gln
50 55 60

Gly Leu Lys Gly Asp Gln Gly Glu Pro Gly Pro Ser Gly Asn Pro Gly

Lys Val Gly Tyr Pro Gly Pro Ser Gly Pro Leu Gly Ala Arg Gly Ile 85 90 95

Pro Gly Ile Lys Gly Thr Lys Gly Ser Pro Gly Asn Ile Lys Asp Gln
100 105 110

Pro Arg Pro Ala Phe Ser Ala Ile Arg Arg Asn Pro Pro Met Gly Gly 115 120 125

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Asn Val Val Ile Phe Asp Thr Val Ile Thr Asn Gln Glu Glu Pro Tyr 130 135 140
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Gln Asn His Ser Gly Arg Phe Val Cys Thr Val Pro Gly Tyr Tyr Tyr 145 150 155 160

Phe Thr Phe Gln Val Leu Ser Gln Trp Glu Ile Cys Leu Ser Ile Val 165 170 175

Ser Ser Ser Arg Gly Gln Val Arg Arg Ser Leu Gly Phe Cys Asp Thr 180 185 190

Thr Asn Lys Gly Leu Phe Gln Val Val Ser Gly Gly Met Val Leu Gln
195 200 205

Leu Gln Gln Gly Asp Gln Val Trp Val Glu Lys Asp Pro Lys Lys Gly 210 215 220

His Ile Tyr Gln Gly Ser Glu Ala Asp Ser Val Phe Ser Gly Phe Leu 225 230 235 240

Ile Phe Pro Ser Ala 245

<210> 2207

<211> 229

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (47)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (49)

<223> Kaa equals any of the naturally occurring L-amino acids

<400> 2207

Met Glu Gly Pro Arg Gly Trp Leu Val Leu Cys Val Leu Ala Ile Ser 1 5 10 15

Leu Ala Ser Met Val Thr Glu Asp Leu Cys Arg Ala Pro Asp Gly Lys 20 25 30

Lys Gly Glu Ala Gly Arg Pro Gly Arg Arg Gly Arg Pro Gly Xaa Lys 35 40 45

Xaa Leu Lys Gly Asp Gln Gly Glu Pro Gly Pro Ser Gly Asn Pro Gly 50 55 60

Lys Val Gly Tyr Pro Gly Pro Ser Gly Pro Leu Gly Ala Arg Gly Ile 65 70 75 80

Pro Gly Ile Lys Gly Thr Lys Gly Ser Pro Gly Asn Ile Lys Asp Gln 85 90 95

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Pro Arg Pro Ala Phe Ser Ala Ile Arg Arg Asn Pro Pro Met Gly Gly
100 105 110
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- Asn Val Val Ile Phe Asp Thr Val Ile Thr Asn Gln Glu Glu Pro Tyr 115 120 125
- Gln Asn His Ser Gly Arg Phe Val Cys Thr Val Pro Gly Tyr Tyr 130 135 140
- Phe Thr Phe Gln Val Leu Ser Gln Trp Glu Ile Cys Leu Ser Ile Val 145 150 155 160
- Ser Ser Ser Arg Gly Gln Val Arg Arg Ser Leu Gly Phe Cys Asp Thr 165 170 175
- Thr Asn Lys Gly Leu Phe Gln Val Val Ser Gly Gly Met Val Leu Gln
  180 185 190
- Leu Gln Gln Gly Asp Gln Val Trp Val Glu Lys Asp Pro Lys Lys Gly 195 200 205
- His Ile Tyr Gln Gly Ser Glu Ala Asp Ser Val Phe Ser Gly Phe Leu 210 215 220
- Ile Phe Pro Ser Ala 225
- <210> 2208
- <211> 207
- <212> PRT
- <213> Homo sapiens
- <220>
- <221> SITE
- <222> (75)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <220>
- <221> SITE
- <222> (77)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <220>
- <221> SITE
- <222> (112)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <400> 2208
- Met Asp Val Gly Pro Ser Ser Leu Pro His Leu Gly Leu Lys Leu Leu 1 5 10 15
- Leu Leu Leu Leu Leu Pro Leu Arg Gly Gln Ala Asn Thr Gly Cys
  20 25 30
- Tyr Gly Ile Pro Gly Met Pro Gly Leu Pro Gly Ala Pro Gly Lys Asp  $35 \hspace{1cm} 40 \hspace{1cm} 45$

- Gly Tyr Asp Gly Leu Pro Gly Pro Lys Gly Glu Pro Gly Ile Pro Ala 50 55 60
- Ile Pro Gly Ile Arg Gly Pro Lys Gly Gln Xaa Gly Xaa Ala Glu Ile 65 70 75 80
- Pro Val Ser Val His Gly His Ser Ala Asp Pro Pro Ala Pro Cys Thr 85 90 95
- Gln Gln Pro Asp Gln Ile Gln Arg Gly Pro His Gln Pro Ala Glu Xaa 100 105 110
- Tyr Asp Thr Ser Thr Gly Lys Phe Thr Cys Lys Val Pro Gly Leu Tyr 115 120 125
- Tyr Phe Val Tyr His Ala Ser His Thr Ala Asn Leu Cys Val Leu Leu 130 135 140
- Tyr Arg Ser Gly Val Lys Val Val Thr Phe Cys Gly His Thr Ser Lys 145 150 155 160
- Thr Asn Gln Val Asn Ser Gly Gly Val Leu Leu Arg Leu Gln Val Gly 165 170 175
- Glu Glu Val Trp Leu Ala Val Asn Asp Tyr Tyr Asp Met Val Gly Ile 180 185 190
- Gln Gly Ser Asp Ser Val Phe Ser Gly Phe Leu Leu Phe Pro Asp 195 200 205

<210> 2209

<211> 235

<212> PRT

<213> Homo sapiens

<400> 2209

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp 1 5 10 15

Leu Arg Gly Ala Arg Cys Asp Met Gln Met Thr Gln Ser Pro Ser Ser 20 25 30

Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Thr Ser 35 40 45

Gln Ser Ile Gly Lys Phe Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln 50 55 60

Ala Pro Lys Leu Leu Ile Ser Gly Ala Ser Ile Leu Gln Thr Gly Val 65 70 75 80

Pro Ser Arg Phe Ser Gly Ser Gly Ser Ala Thr Tyr Phe Thr Leu Thr 85 90 95

Ile Asn Asp Leu His Pro Glu Asp Ser Ala Thr Tyr Tyr Cys Gln Gln 100 105 110

Asp Tyr Thr Thr Pro Leu Phe Gly Gln Gly Thr Lys Val Glu Ile Lys 1470

115 120 125

Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu 130 135 140

Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe 145 150 155 160

Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln 165 170 175

Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser 180 185 190

Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
195 200 205

Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser 210 215 220

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys 225 230 235

<210> 2210

<211> 234

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (120)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 2210

Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp Leu Ser 1 5 10 15

Gly Ala Arg Cys Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser 20 25 30

Ala Ser Leu Gly Asp Ser Val Thr Ile Thr Cys Gln Ala Ser Gln Asp 35 40 45

Ile Ala Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Pro Pro 50 60

Lys Leu Val Ile Phe Asp Gly Ser Ile Leu His Thr Gly Val Pro Ser 65 70 75 80

Arg Phe Ser Gly Gly Gly Ser Gly Thr His Phe Thr Phe Thr Ile Asn 85 90 95

Asn Leu Gln Pro Asp Asp Val Ala Thr Tyr Ser Cys Gln Gln Tyr Asn 100 105 110

Thr Phe Pro Leu Thr Phe Gly Xaa Gly Thr Lys Val Glu Ile Lys Arg 115 120 125 Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln 130 135 140

Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr 145 150 155 160

Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser 165 170 175

Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr 180 185 190

Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys 195 200 205

His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro 210 215 220

Val Thr Lys Ser Phe Asn Arg Gly Glu Cys 225

<210> 2211

<211> 206

<212> PRT

<213> Homo sapiens

<400> 2211

Met Asp Val Gly Pro Ser Ser Leu Pro His Leu Gly Leu Lys Leu Leu  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Leu Leu Leu Leu Leu Pro Leu Arg Gly Gln Ala Asn Thr Gly Cys 20 25 30

Tyr Gly Ile Pro Gly Met Pro Gly Leu Pro Gly Ala Pro Gly Lys Asp \$40\$

Gly Tyr Asp Gly Leu Pro Gly Pro Lys Gly Glu Pro Gly Ile Pro Ala 50 55 60

Ile Pro Gly Ile Arg Gly Pro Lys Gly Arg Tyr Lys Gln Lys Phe Gln 65 70 75 80

Ser Val Phe Thr Val Thr Arg Gln Thr His Gln Pro Pro Ala Pro Asn 85 90 95

Ser Leu Ile Arg Phe Asn Ala Val Leu Thr Asn Pro Gln Gly Asp Tyr 100 105 110

Asp Thr Ser Thr Gly Lys Phe Thr Cys Lys Val Pro Gly Leu Tyr Tyr 115 120 125

Phe Val Tyr His Ala Ser His Thr Ala Asn Leu Cys Val Leu Leu Tyr 130 135 140

Arg Ser Gly Val Lys Val Val Thr Phe Cys Gly His Thr Ser Lys Thr 145 150 155 160

Asn Gln Val Asn Ser Gly Gly Val Leu Leu Arg Leu Gln Val Gly Glu

165 170 175

Glu Val Trp Leu Ala Val Asn Asp Tyr Tyr Asp Met Val Gly Ile Gln
180 185 190

Gly Ser Asp Ser Val Phe Ser Gly Phe Leu Leu Phe Pro Asp 195 200 205

<210> 2212

<211> 208

<212> PRT

<213> Homo sapiens

<400> 2212

Met Asp Val Gly Pro Ser Ser Leu Pro His Leu Gly Leu Lys Leu Leu 1 5 10 15

Leu Leu Leu Leu Leu Pro Leu Arg Gly Gln Ala Asn Thr Gly Cys 20 25 30

Tyr Gly Ile Pro Gly Met Pro Gly Leu Pro Gly Ala Pro Gly Lys Asp 35 40 45

Gly Tyr Asp Gly Leu Pro Gly Pro Lys Gly Glu Pro Gly Ile Pro Ala 50 60

Ile Pro Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu 65 70 75 80

Pro Gly His Pro Gly Lys Asn Gly Pro Met Gly Pro Pro Gly Met Pro 85 90 95

Gly Val Pro Gly Pro Met Gly Ile Pro Gly Glu Pro Gly Glu Glu Gly 100 105 110

Arg Tyr Lys Gln Lys Phe Gln Ser Val Phe Thr Val Thr Arg Gln Thr 115 120 125

His Gln Pro Pro Ala Pro Asn Ser Leu Ile Arg Phe Asn Ala Val Leu 130 135 140

Thr Asn Pro Gln Glu Ile Met Thr Arg Ala Leu Ala Ser Ser Pro Ala 145 150 155 160

Lys Ser Pro Ala Ser Thr Thr Leu Ser Thr Thr Arg Arg Ile Gln Pro 165 170 175

Thr Cys Ala Cys Cys Cys Thr Ala Ala Ser Lys Trp Ser Pro Ser 180 185 190

Val Ala Thr Arg Pro Lys Pro Ile Arg Ser Thr Arg Ala Val Cys Cys 195 200 205

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<210> 2213
<211> 263
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 2213
Met Cys Leu Leu Gly Gly Leu Ser Ala Pro Pro Leu Leu Leu Pro
Leu Leu Pro Leu Leu Cys Pro Pro Thr Xaa Gln Gly Asp Cys Ser
Phe Pro Pro Glu Leu Pro Asn Ala Ile Gln Ser Val Gly Asp Gln Gln
Ser Phe Pro Glu Lys Phe Thr Val Thr Tyr Lys Cys Lys Glu Gly Phe
Val Lys Val Pro Gly Lys Ala Asp Ser Val Val Cys Leu Asn Asn Lys
Trp Ser Glu Val Ala Glu Phe Cys Asn Arg Ser Cys Asp Val Pro Thr
Arg Leu Gln Phe Ala Ser Leu Lys Lys Ser Phe Thr Lys Gln Asn Xaa
                                105
Phe Pro Val Gly Ser Val Val Glu Tyr Glu Cys Arg Pro Gly Tyr Gln
Arg Asp His Leu Leu Ser Gly Lys Leu Thr Cys Leu Leu Asn Phe Thr
                        135
Trp Ser Lys Pro Asp Glu Phe Cys Lys Arg Lys Ser Cys Pro Asn Pro
Gly Asp Leu Arg His Gly His Val Asn Ile Pro Thr Asp Ile Leu Tyr
                                    170
Ala Ala Val Ile His Phe Ser Cys Asn Lys Gly Tyr Arg Leu Val Gly
Ala Ala Ser Ser Tyr Cys Ser Ile Val Asn Asp Asp Val Gly Trp Ser
                             200
Asp Pro Leu Pro Glu Cys Gln Glu Ile Phe Cys Pro Glu Pro Pro Lys
 Ile Ser Asn Gly Val Ile Leu Asp Gln Gln Asn Thr Tyr Val Tyr Gln
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230

235

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Gln Ala Val Lys Tyr Glu Cys Ile Lys Gly Phe Thr Leu Ile Gly Glu 245 250 255
```

Asn Ser Asp Leu Leu Tyr Cys 260

<210> 2214

<211> 55

<212> PRT

<213> Homo sapiens

<400> 2214

Met Cys Leu Leu Gly Gly Leu Ser Ala Pro Pro Leu Leu Leu Pro 1 5 10

Leu Leu Pro Leu Leu Cys Pro Pro Thr Gly Arg Val Thr Ala Ala 20 25 30

Phe Pro Gln Ser Tyr Leu Met Pro Tyr Lys Val Trp Val Thr Asn Arg 35 40 45

Val Phe Leu Lys Asn Ser Gln 50 55

<210> 2215

<211> 350

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 2215

Met Ala Xaa Xaa Val Val Leu Leu Ala Leu Val Ala Gly Val Leu Gly 1 5 10 15

Asn Glu Phe Ser Ile Leu Lys Ser Pro Gly Ser Val Val Phe Arg Asn 20 25 30

Gly Asn Trp Pro Ile Pro Gly Glu Arg Ile Pro Asp Val Ala Ala Leu  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ 

Ser Met Gly Phe Ser Val Lys Glu Asp Leu Ser Trp Pro Gly Leu Ala 50 55 60

Val Gly Asn Leu Phe His Arg Pro Arg Ala Thr Val Met Val Met Val 65 70 75 80

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Lys Gly Val Asn Lys Leu Ala Leu Pro Pro Gly Ser Val Ile Ser Tyr 85 90 95
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Pro Leu Glu Asn Ala Val Pro Phe Ser Leu Asp Ser Val Ala Asn Ser 100 105 110

Ile His Ser Leu Phe Ser Glu Glu Thr Pro Val Val Leu Gln Leu Ala 115 120 125

Pro Ser Glu Glu Arg Val Tyr Met Val Gly Lys Ala Asn Ser Val Phe 130 135 140

Glu Asp Leu Ser Val Thr Leu Arg Gln Leu Arg Asn Arg Leu Phe Gln 145 150 155 160

Glu Asn Ser Val Leu Ser Ser Leu Pro Leu Asn Ser Leu Ser Arg Asn 165 170 175

Asn Glu Val Asp Leu Leu Phe Leu Ser Glu Leu Gln Val Leu His Asp 180 185 190

Ile Ser Ser Leu Leu Ser Arg His Lys His Leu Ala Lys Asp His Ser 195 200 205

Pro Asp Leu Tyr Ser Leu Glu Leu Ala Gly Leu Asp Glu Ile Gly Lys 210 215 220

Arg Tyr Gly Glu Asp Ser Glu Gln Phe Arg Asp Ala Ser Lys Ile Leu 225 230 235 240

Val Asp Ala Leu Gln Lys Phe Ala Asp Asp Met Tyr Ser Leu Tyr Gly 245 250 255

Gly Asn Ala Val Val Glu Leu Val Thr Val Lys Ser Phe Asp Thr Ser 260 265 270

Leu Ile Arg Lys Thr Arg Thr Ile Leu Glu Ala Lys Gln Ala Lys Asn 275 280 285

Pro Ala Ser Pro Tyr Asn Leu Ala Tyr Lys Tyr Asn Phe Glu Tyr Ser 290 295 300

Val Val Phe Asn Met Val Leu Trp Ile Met Ile Ala Leu Ala Leu Ala 305 310 315 320

Val Ile Ile Thr Ser Tyr Asn Ile Trp Asn Met Asp Pro Gly Tyr Asp 325 330 335

Ser Ile Ile Tyr Arg Met Thr Asn Gln Lys Ile Arg Met Asp 340 345 350

<210> 2216

<211> 350

<212> PRT

<213> Homo sapiens

<400> 2216

Met Ala Val Phe Val Val Leu Leu Ala Leu Val Ala Gly Val Leu Gly

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Asn	Glu	Phe	Ser 20	Ile	Leu	Lys	Ser	Pro 25	Gly	Ser	Val	Val	Phe 30	Arg	Asn
Gly	Asn	Trp 35	Pro	Ile	Pro	Gly	Glu 40	Arg	Ile	Pro	Asp	Val 45	Ala	Ala	Leu
Ser	Met 50	Gly	Phe	Ser	Val	Lys 55	Glu	Asp	Leu	Ser	Trp 60	Pro	Gly	Leu	Ala
Val 65	Gly	Asn	Leu	Phe	His 70	Arg	Pro	Arg	Ala	Thr 75	Val	Met	Val	Met	Val 80
Lys	Gly	Val	Asn	Lys 85	Leu	Ala	Leu	Pro	Pro 90	Gly	Ser	Val	Ile	Ser 95	Tyr
Pro	Leu	Glu	Asn 100	Ala	Val	Pro	Phe	Ser 105	Leu	Asp	Ser	Val	Ala 110	Asn	Ser
Ile	His	Ser 115	Leu	Phe	Ser	Glu	Glu 120	Thr	Pro	Val	Val	Leu 125	Gln	Leu	Ala
Pro	Ser 130	Glu	Glu	Arg	Val	Tyr 135	Met	Val	Gly	Lys	Ala 140	Asn	Ser	Val	Phe
Glu 145	Asp	Leu	Ser	Val	Thr 150	Leu	Arg	Gln	Leu	Arg 155	Asn	Arg	Leu	Phe	Gln 160
Glu	Asn	Ser	Val	Leu 165	Ser	Ser	Leu	Pro	Leu 170	Asn	Ser	Leu	Ser	Arg 175	Asn
Asn	Glu	Val	Asp 180	Leu	Leu	Phe	Leu	Ser 185	Glu	Leu	Gln	Val	Leu 190	His	Asp
Ile	Ser	Ser 195	Leu	Leu	Ser	Arg	His 200	Lys	His	Leu	Ala	Lys 205	Asp	His	Ser
Pro	Asp 210	Leu	Tyr	Ser	Leu	Glu 215	Leu	Ala	Gly	Leu	Asp 220	Glu	Ile	Gly	Lys
Arg 225		Gly	Glu	Asp			Gln		Arg	Asp 235		Ser	Lys	Ile	Leu 240
Val	Asp	Ala	Leu	Gln 245		Phe	Ala	Asp	Asp 250	Met	Tyr	Ser	Leu	Tyr 255	
Gly	Asn	Ala	Val 260		Glu	Leu	Val	Thr 265	Val	Lys	Ser	Phe	Asp 270	Thr	Ser
Leu	Ile	Arg 275	Lys	Thr	Arg	Thr	Ile 280		Glu	Ala	. Lys	Gln 285		Lys	Asn
Pro	Ala 290	Ser	Pro	Tyr	Asn	. Leu 295		Tyr	Lys	Tyr	Asn 300	Phe	Glu	Tyr	Ser
Val 305		Phe	Asn	Met	Val 310		Trp	Ile	Met	Ile 315		Leu	Ala	Leu	Ala 320
Val	Ile	Ile	Thr	Ser	Tyr	· Asn	Ile		Asn L477	Met	: Asp	) Pro	Gly	Tyr	Asp

325 330 335

Ser Ile Ile Tyr Arg Met Thr Asn Gln Lys Ile Arg Met Asp 340 345 350

<210> 2217

<211> 167

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (61)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (79)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 2217

Met Cys Ser Leu Phe His Ala Phe Ile Phe Ala Gln Leu Trp Thr Val

Tyr Cys Glu Gln Ser Ala Val Ala Thr Asn Leu Gln Asn Gln Asn Glu 20 25 30

Phe Ser Phe Thr Ala Ile Leu Thr Ala Leu Glu Phe Trp Ser Arg Val

Thr Pro Ser Ile Leu Gln Leu Met Ala His Asn Lys Xaa Met Val Glu 50 55 60

Met Val Cys Leu His Val Ile Ser Leu Met Glu Ala Leu Gln Xaa Cys 65 70 75 80

Asn Ser Thr Ile Phe Val Lys Leu Ile Pro Met Trp Leu Pro Met Ile 85 90 95

Gln Ser Asn Ile Lys His Leu Ser Ala Gly Leu Gln Leu Arg Leu Gln 100 105 110

Ala Ile Gln Asn His Val Asn His His Ser Leu Arg Thr Leu Pro Gly 115 120 125

Ser Gly Gln Ser Ser Ala Gly Leu Ala Ala Leu Arg Lys Trp Leu Gln 130 135 140

Cys Thr Gln Phe Lys Met Ala Gln Val Glu Ile Gln Ser Ser Glu Ala 145 150 155 160

Ala Ser Gln Phe Tyr Pro Leu 165

<210> 2218

<211> 110

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<212> PRT
<213> Homo sapiens
<400> 2218
Met Glu Phe Pro Gly Ala Asp Gly Cys Asn Gln Val Asp Ala Glu Tyr
Leu Lys Val Gly Ser Glu Gly His Phe Arg Val Pro Ala Leu Gly Tyr
                                 25
Leu Asp Val Arg Ile Val Asp Thr Asp Tyr Ser Ser Phe Ala Val Leu
                             40
Tyr Ile Tyr Lys Glu Leu Glu Gly Ala Leu Ser Thr Met Val Gln Leu
Tyr Ser Arg Thr Gln Asp Val Ser Pro Gln Ala Leu Lys Ala Phe Gln
Asp Phe Tyr Pro Thr Leu Gly Leu Pro Glu Asp Met Met Val Met Leu
Pro Gln Ser Asp Ala Cys Asn Pro Glu Ser Lys Glu Ala Pro
                                105
            100
<210> 2219
<211> 115
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (106)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 2219
Ile Ser Leu Leu Trp Asn Leu Trp Gln Ser Val Lys Ile Gly Cys Gly
```

Clu Lvs Leu Tvr Pro Glv His Thr Lvs Asp Ser Arg Asn His Leu Gly

Glu Lys Leu Tyr Pro Gly His Thr Lys Asp Ser Arg Asn His Leu Gly
20 25 30

Gln Asn Leu Ser Phe Leu His Phe Ile Tyr Leu Phe Pro Pro Pro His 35 40 45

Ser Thr His Thr Leu Pro Thr Ser Ser Thr Ser Thr Phe Lys His Lys 50 55 60

Asp Val Arg Val Phe Ser Leu Ser Val Ser Trp Arg Thr Gly Cys Trp 65 70 75 80

Glu Arg Lys Gly Gln Met Ser Lys Gly Gly Cys Arg Ala Gly Gln Ala 85 90 95 Asp Ser Gly Gly Xaa Leu Glu Glu Leu Xaa Pro Ser Gln Thr Trp Val 100 105 110

Ser Lys Thr 115

<210> 2220

<211> 262

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (254)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 2220

Met Glu Cys Cys Arg Arg Ala Thr Pro Gly Thr Leu Leu Phe Leu 1 5 10 15

Ala Phe Leu Leu Ser Ser Arg Thr Ala Arg Ser Glu Glu Asp Arg

Asp Gly Leu Trp Asp Ala Trp Gly Pro Trp Ser Glu Cys Ser Arg Thr 35 40 45

Cys Gly Gly Gly Ala Ser Tyr Ser Leu Arg Arg Cys Leu Ser Ser Lys 50 55 60

Ser Cys Glu Gly Arg Asn Ile Arg Tyr Arg Thr Cys Ser Asn Val Asp 65 70 75 80

Cys Pro Pro Glu Ala Gly Asp Phe Arg Ala Gln Gln Cys Ser Ala His 85 90 95

Asn Asp Val Lys His His Gly Gln Phe Tyr Glu Trp Leu Pro Val Ser 100 105 110

Asn Asp Pro Asp Asn Pro Cys Ser Leu Lys Cys Gln Ala Lys Gly Thr 115 120 125

Thr Leu Val Val Glu Leu Ala Pro Lys Val Leu Asp Gly Thr Arg Cys 130 135 140

Tyr Thr Glu Ser Leu Asp Met Cys Ile Ser Gly Leu Cys Gln Ile Val 145 150 155 160

Gly Cys Asp His Gln Leu Gly Ser Thr Val Lys Glu Asp Asn Cys Gly 165 170 175

Val Cys Asn Gly Asp Gly Ser Thr Cys Arg Leu Val Arg Gly Gln Tyr
180 185 190

Lys Ser Gln Leu Ser Ala Thr Lys Ser Asp Asp Thr Val Val Ala Ile

Pro Tyr Gly Ser Arg His Ile Arg Leu Val Leu Lys Gly Pro Asp His 1480

210 215 220

Leu Tyr Leu Glu Thr Lys Thr Leu Gln Gly Thr Lys Gly Glu Asn Ser 225 230 235 240

Leu Ser Ser Thr Gly Thr Phe Leu Val Asp Asn Ser Ser Xaa Thr Ser 245 250 255

Arg Asn Phe Gln Thr Lys 260

<210> 2221

<211> 514

<212> PRT

<213> Homo sapiens

<400> 2221

Glu Leu Cys Arg Gln Pro Lys Pro Ser Thr Val Gln Ala Cys Asn Arg 1 5 10 15

Phe Asn Cys Pro Pro Ala Trp Tyr Pro Ala Gln Trp Gln Pro Cys Ser 20 25 30

Arg Thr Cys Gly Gly Gly Val Gln Lys Arg Glu Val Leu Cys Lys Gln 35 40 45

Arg Met Ala Asp Gly Ser Phe Leu Glu Leu Pro Glu Thr Phe Cys Ser 50 55 60

Ala Ser Lys Pro Ala Cys Gln Gln Ala Cys Lys Lys Asp Asp Cys Pro 65 70 75 80

Ser Glu Trp Leu Leu Ser Asp Trp Thr Glu Cys Ser Thr Ser Cys Gly 85 90 95

Glu Gly Thr Gln Thr Arg Ser Ala Ile Cys Arg Lys Met Leu Lys Thr 100 105 110

Gly Leu Ser Thr Val Val Asn Ser Thr Leu Cys Pro Pro Leu Pro Phe 115 120 125

Ser Ser Ser Ile Arg Pro Cys Met Leu Ala Thr Cys Ala Arg Pro Gly 130 135 140

Tyr Ile Gln Thr Arg Arg Gln Arg Lys Leu His Phe Val Val Gly Gly 165 170 175

Phe Ala Tyr Leu Leu Pro Lys Thr Ala Val Val Leu Arg Cys Pro Ala 180 185 190

Arg Arg Val Arg Lys Pro Leu Ile Thr Trp Glu Lys Asp Gly Gln His

Leu Ile Ser Ser Thr His Val Thr Val Ala Pro Phe Gly Tyr Leu Lys 210 215 220

Ile His Arg Leu Lys Pro Ser Asp Ala Gly Val Tyr Thr Cys Ser Ala 230 Gly Pro Ala Arg Glu His Phe Val Ile Lys Leu Ile Gly Gly Asn Arg 245 Lys Leu Val Ala Arg Pro Leu Ser Pro Arg Ser Glu Glu Val Leu 265 Ala Gly Arg Lys Gly Gly Pro Lys Glu Ala Leu Gln Thr His Lys His Gln Asn Gly Ile Phe Ser Asn Gly Ser Lys Ala Glu Lys Arg Gly Leu 295 Ala Ala Asn Pro Gly Ser Arg Tyr Asp Asp Leu Val Ser Arg Leu Leu 310 Glu Gln Gly Gly Trp Pro Gly Glu Leu Leu Ala Ser Trp Glu Ala Gln Asp Ser Ala Glu Arg Asn Thr Thr Ser Glu Glu Asp Pro Gly Ala Glu 345 Gln Val Leu Leu His Leu Pro Phe Thr Met Val Thr Glu Gln Arg Arg Leu Asp Asp Ile Leu Gly Asn Leu Ser Gln Gln Pro Glu Glu Leu Arg 375 Asp Leu Tyr Ser Lys His Leu Val Ala Gln Leu Ala Gln Glu Ile Phe 385 390 Arg Ser His Leu Glu His Gln Asp Thr Leu Leu Lys Pro Ser Glu Arg 410 Arg Thr Ser Pro Val Thr Leu Ser Pro His Lys His Val Ser Gly Phe Ser Ser Ser Leu Arg Thr Ser Ser Thr Gly Asp Ala Gly Gly Ser 440 Arg Arg Pro His Arg Lys Pro Thr Ile Leu Arg Lys Ile Ser Ala Ala 450 455 Gln Gln Leu Ser Ala Ser Glu Val Val Thr His Leu Gly Gln Thr Val 475 Ala Leu Ala Ser Gly Thr Leu Ser Val Phe Cys Thr Val Arg Pro Ser 485 Ala Thr Gln Gly Leu Pro Ser Ala Gly Pro Gly Met Glu Lys Lys Ser

Val Gln

505

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<210> 2222
<211> 1745
<212> PRT
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<213> Homo sapiens

<400> 2222

Met Glu Cys Cys Arg Arg Ala Thr Pro Gly Thr Leu Leu Phe Leu 1 5 10 15

Ala Phe Leu Leu Ser Ser Arg Thr Ala Arg Ser Glu Glu Asp Arg 20 25 30

Asp Gly Leu Trp Asp Ala Trp Gly Pro Trp Ser Glu Cys Ser Arg Thr 35 40 45

Cys Gly Gly Ala Ser Tyr Ser Leu Arg Arg Cys Leu Ser Ser Lys 50 60

Ser Cys Glu Gly Arg Asn Ile Arg Tyr Arg Thr Cys Ser Asn Val Asp 65 70 75 80

Cys Pro Pro Glu Ala Gly Asp Phe Arg Ala Gln Gln Cys Ser Ala His
85 90 95

Asn Asp Val Lys His His Gly Gln Phe Tyr Glu Trp Leu Pro Val Ser 100 105 110

Asn Asp Pro Asp Asn Pro Cys Ser Leu Lys Cys Gln Ala Lys Gly Thr 115 120 125

Thr Leu Val Val Glu Leu Ala Pro Lys Val Leu Asp Gly Thr Arg Cys 130 135 140

Tyr Thr Glu Ser Leu Asp Met Cys Ile Ser Gly Leu Cys Gln Ile Val 145 150 155 160

Gly Cys Asp His Gln Leu Gly Ser Thr Val Lys Glu Asp Asn Cys Gly 165 170 175

Val Cys Asn Gly Asp Gly Ser Thr Cys Arg Leu Val Arg Gly Gln Tyr 180 185 190

Lys Ser Gln Leu Ser Ala Thr Lys Ser Asp Asp Thr Val Val Ala Ile 195 200 205

Pro Tyr Gly Ser Arg His Ile Arg Leu Val Leu Lys Gly Pro Asp His 210 215 220

Leu Tyr Leu Glu Thr Lys Thr Leu Gln Gly Thr Lys Gly Glu Asn Ser 225 230 235 240

Leu Ser Ser Thr Gly Thr Phe Leu Val Asp Asn Ser Ser Val Asp Phe 245 250 255

Gln Lys Phe Pro Asp Lys Glu Ile Leu Arg Met Ala Gly Pro Leu Thr 260 265 270

Ala Asp Phe Ile Val Lys Ile Arg Asn Ser Gly Ser Ala Asp Ser Thr 275 280 285

- Val Gln Phe Ile Phe Tyr Gln Pro Ile Ile His Arg Trp Arg Glu Thr Asp Phe Phe Pro Cys Ser Ala Thr Cys Gly Gly Gly Tyr Gln Leu Thr 315 310 Ser Ala Glu Cys Tyr Asp Leu Arg Ser Asn Arg Val Val Ala Asp Gln 330 Tyr Cys His Tyr Tyr Pro Glu Asn Ile Lys Pro Lys Pro Lys Leu Gln 345 Glu Cys Asn Leu Asp Pro Cys Pro Ala Arg Trp Glu Ala Thr Pro Trp Thr Ala Cys Ser Ser Ser Cys Gly Gly Gly Ile Gln Ser Arg Ala Val Ser Cys Val Glu Glu Asp Ile Gln Gly His Val Thr Ser Val Glu Glu 395 390 Trp Lys Cys Met Tyr Thr Pro Lys Met Pro Ile Ala Gln Pro Cys Asn Ile Phe Asp Cys Pro Lys Trp Leu Ala Gln Glu Trp Ser Pro Cys Thr 425 Val Thr Cys Gly Gln Gly Leu Arg Tyr Arg Val Val Leu Cys Ile Asp His Arg Gly Met His Thr Gly Gly Cys Ser Pro Lys Thr Lys Pro His Ile Lys Glu Glu Cys Ile Val Pro Thr Pro Cys Tyr Lys Pro Lys Glu 465 Lys Leu Pro Val Glu Ala Lys Leu Pro Trp Phe Lys Gln Ala Gln Glu 490 Leu Glu Glu Gly Ala Ala Val Ser Glu Glu Pro Ser Phe Ile Pro Lys 505 Ala Trp Ser Ala Cys Thr Val Thr Cys Gly Val Gly Thr Gln Val Arg
  - 515 520 525

    Ile Val Arg Cys Gln Val Leu Leu Ser Phe Ser Gln Ser Val Ala Asp
  - Leu Pro Ile Asp Glu Cys Glu Gly Pro Lys Pro Ala Ser Gln Arg Ala
    545 550 555 560
- Cys Tyr Ala Gly Pro Cys Ser Gly Glu Ile Pro Glu Phe Asn Pro Asp 565 570 575
- Glu Thr Asp Gly Leu Phe Gly Gly Leu Gln Asp Phe Asp Glu Leu Tyr 580 585 590
- Asp Trp Glu Tyr Glu Gly Phe Thr Lys Cys Ser Glu Ser Cys Gly Gly 595 600 605

- Gly Val Gln Glu Ala Val Val Ser Cys Leu Asn Lys Gln Thr Arg Glu 610 620
- Pro Ala Glu Glu Asn Leu Cys Val Thr Ser Arg Arg Pro Pro Gln Leu 625 630 635 640
- Leu Lys Ser Cys Asn Leu Asp Pro Cys Pro Ala Arg Trp Glu Ile Gly 645 650 650
- Lys Trp Ser Pro Cys Ser Leu Thr Cys Gly Val Gly Leu Gln Thr Arg 660 665 670
- Asp Val Phe Cys Ser His Leu Leu Ser Arg Glu Met Asn Glu Thr Val 675 680 685
- Ile Leu Ala Asp Glu Leu Cys Arg Gln Pro Lys Pro Ser Thr Val Gln 690 695 700
- Ala Cys Asn Arg Phe Asn Cys Pro Pro Ala Trp Tyr Pro Ala Gln Trp 705 710 715 720
- Gln Pro Cys Ser Arg Thr Cys Gly Gly Gly Val Gln Lys Arg Glu Val 725 730 735
- Leu Cys Lys Gln Arg Met Ala Asp Gly Ser Phe Leu Glu Leu Pro Glu 740 745 750
- Thr Phe Cys Ser Ala Ser Lys Pro Ala Cys Gln Gln Ala Cys Lys Lys 755 760 765
- Asp Asp Cys Pro Ser Glu Trp Leu Leu Ser Asp Trp Thr Glu Cys Ser 770 780
- Thr Ser Cys Gly Glu Gly Thr Gln Thr Arg Ser Ala Ile Cys Arg Lys 785 790 795 800
- Met Leu Lys Thr Gly Leu Ser Thr Val Val Asn Ser Thr Leu Cys Pro805 810 815
- Pro Leu Pro Phe Ser Ser Ser Ile Arg Pro Cys Met Leu Ala Thr Cys 820 825 830
- Ala Arg Pro Gly Arg Pro Ser Thr Lys His Ser Pro His Ile Ala Ala 835 840 845
- Ala Arg Lys Val Tyr Ile Gln Thr Arg Arg Gln Arg Lys Leu His Phe 850 855 860
- Val Val Gly Gly Phe Ala Tyr Leu Leu Pro Lys Thr Ala Val Val Leu 865 870 875 880
- Arg Cys Pro Ala Arg Arg Val Arg Lys Pro Leu Ile Thr Trp Glu Lys 885 890 895
- Asp Gly Gln His Leu Ile Ser Ser Thr His Val Thr Val Ala Pro Phe 900 905 910
- Gly Tyr Leu Lys Ile His Arg Leu Lys Pro Ser Asp Ala Gly Val Tyr 915 920 925

- Thr Cys Ser Ala Gly Pro Ala Arg Glu His Phe Val Ile Lys Leu Ile 930 935 940
- Gly Gly Asn Arg Lys Leu Val Ala Arg Pro Leu Ser Pro Arg Ser Glu 945 950 955 960
- Glu Glu Val Leu Ala Gly Arg Lys Gly Gly Pro Lys Glu Ala Leu Gln 965 970 975
- Thr His Lys His Gln Asn Gly Ile Phe Ser Asn Gly Ser Lys Ala Glu 980 985 990
- Lys Arg Gly Leu Ala Ala Asn Pro Gly Ser Arg Tyr Asp Asp Leu Val 995 1000 1005
- Ser Arg Leu Leu Glu Gln Gly Gly Trp Pro Gly Glu Leu Leu Ala Ser 1010 1015 1020
- Trp Glu Ala Gln Asp Ser Ala Glu Arg Asn Thr Thr Ser Glu Glu Asp 1025 1030 1035 1040
- Pro Gly Ala Glu Gln Val Leu Leu His Leu Pro Phe Thr Met Val Thr
  1045 1050 1055
- Glu Gln Arg Arg Leu Asp Asp Ile Leu Gly Asn Leu Ser Gln Gln Pro 1060 1065 1070
- Glu Glu Leu Arg Asp Leu Tyr Ser Lys His Leu Val Ala Gln Leu Ala 1075 1080 1085
- Gln'Glu Ile Phe Arg Ser His Leu Glu His Gln Asp Thr Leu Leu Lys 1090 1095 1100
- Pro Ser Glu Arg Arg Thr Ser Pro Val Thr Leu Ser Pro His Lys His 1105 1110 1115 1120
- Val Ser Gly Phe Ser Ser Ser Leu Arg Thr Ser Ser Thr Gly Asp Ala 1125 1130 1135
- Gly Gly Gly Ser Arg Arg Pro His Arg Lys Pro Thr Ile Leu Arg Lys 1140 1145 1150
- Ile Ser Ala Ala Gln Gln Leu Ser Ala Ser Glu Val Val Thr His Leu 1155 1160 1165
- Gly Gln Thr Val Ala Leu Ala Ser Gly Thr Leu Ser Val Leu Leu His 1170 1175 1180
- Cys Glu Ala Ile Gly His Pro Arg Pro Thr Ile Ser Trp Ala Arg Asn 1185 1190 1195 1200
- Gly Glu Glu Val Gln Phe Ser Asp Arg Ile Leu Leu Gln Pro Asp Asp 1205 1210 1215
- Ser Leu Gln Ile Leu Ala Pro Val Glu Ala Asp Val Gly Phe Tyr Thr 1220 1225 1230
- Cys Asn Ala Thr Asn Ala Leu Gly Tyr Asp Ser Val Ser Ile Ala Val 1235 1240 1245

- Thr Leu Ala Gly Lys Pro Leu Val Lys Thr Ser Arg Met Thr Val Ile 1250 1255 1260
- Asn Thr Glu Lys Pro Ala Val Thr Val Asp Ile Gly Ser Thr Ile Lys 1265 1270 1275 1280
- Thr Val Gln Gly Val Asn Val Thr Ile Asn Cys Gln Val Ala Gly Val 1285 1290 1295
- Pro Glu Ala Glu Val Thr Trp Phe Arg Asn Lys Ser Lys Leu Gly Ser 1300 1305 1310
- Pro His His Leu His Glu Gly Ser Leu Leu Leu Thr Asn Val Ser Ser 1315 1320 1325
- Ser Asp Gln Gly Leu Tyr Ser Cys Arg Ala Ala Asn Leu His Gly Glu 1330 1335 1340
- Leu Thr Glu Ser Thr Gln Leu Leu Ile Leu Asp Pro Pro Gln Val Pro 1345 1350 1355
- Thr Gln Leu Glu Asp Ile Arg Ala Leu Leu Ala Ala Thr Gly Pro Asn 1365 1370 1375
- Leu Pro Ser Val Leu Thr Ser Pro Leu Gly Thr Gln Leu Val Leu Asp 1380 1385 1390
- Pro Gly Asn Ser Ala Leu Leu Gly Cys Pro Ile Lys Gly His Pro Val
- Pro Asn Ile Thr Trp Phe His Gly Gly Gln Pro Ile Val Thr Ala Thr 1410 1420
- Gly Leu Thr His His Ile Leu Ala Ala Gly Gln Ile Leu Gln Val Ala 1425 1430 1435 1440
- Asn Leu Ser Gly Gly Ser Gln Gly Glu Phe Ser Cys Leu Ala Gln Asn 1445 1450 1455
- Glu Ala Gly Val Leu Met Gln Lys Ala Ser Leu Val Ile Gln Asp Tyr 1460 1465 1470
- Trp Trp Ser Val Asp Arg Leu Ala Thr Cys Ser Ala Ser Cys Gly Asn 1475 1480 1485
- Arg Gly Val Gln Gln Pro Arg Leu Arg Cys Leu Leu Asn Ser Thr Glu 1490 1495 1500
- Val Asn Pro Ala His Cys Ala Gly Lys Val Arg Pro Ala Val Gln Pro 1505 1510 1515 1520
- Ile Ala Cys Asn Arg Arg Asp Cys Pro Ser Arg Trp Met Val Thr Ser 1525 1530 1535
- Trp Ser Ala Cys Thr Arg Ser Cys Gly Gly Gly Val Gln Thr Arg Arg 1540 1545 1550
- Val Thr Cys Gln Lys Leu Lys Ala Ser Gly Ile Ser Thr Pro Val Ser 1555 1560 1565

Asn Asp Met Cys Thr Gln Val Ala Lys Arg Pro Val Asp Thr Gln Ala 1570 1580

Cys Asn Gln Gln Leu Cys Val Glu Trp Ala Phe Ser Ser Trp Gly Gln 1585 1590 1595 1600

Cys Asn Gly Pro Cys Ile Gly Pro His Leu Ala Val Gln His Arg Gln 1605 1610 1615

Val Phe Cys Gln Thr Arg Asp Gly Ile Thr Leu Pro Ser Glu Gln Cys 1620 1630

Ser Ala Leu Pro Arg Pro Val Ser Thr Gln Asn Cys Trp Ser Glu Ala 1635 1640 1645

Cys Ser Val His Trp Arg Val Ser Leu Trp Thr Leu Cys Thr Ala Thr 1650 1660

Cys Gly Asn Tyr Gly Phe Gln Ser Arg Arg Val Glu Cys Val His Ala 1665 1670 1680

Arg Thr Asn Lys Ala Val Pro Glu His Leu Cys Ser Trp Gly Pro Arg 1685 1690 1695

Pro Ala Asn Trp Gln Arg Cys Asn Ile Thr Pro Cys Glu Asn Met Glu 1700 1705 1710

Cys Arg Asp Thr Thr Arg Tyr Cys Glu Lys Val Lys Gln Leu Lys Leu 1715 1720 1725

Cys Gln Leu Ser Gln Phe Lys Ser Arg Cys Cys Gly Thr Cys Gly Lys 1730 1735 1740

Ala 1745

<210> 2223

<211> 19

<212> PRT

<213> Homo sapiens

<400> 2223

Glu Cys Cys Glu Thr Ala Ala Pro Pro Gly Pro His Arg Arg Pro Glu 1 5 10 15

Ser Gly Gln

<210> 2224

<211> 363

<212> PRT

<213> Homo sapiens

<400> 2224

Met Ala Ala Val Leu Thr Trp Ala Leu Ala Leu Leu Ser Ala Phe Ser 1 5 10 15

- Ala Thr Gln Ala Arg Lys Gly Phe Trp Asp Tyr Phe Ser Gln Thr Ser 20 25 30
- Gly Asp Lys Gly Arg Val Glu Gln Ile His Gln Gln Lys Met Ala Arg \$35\$ \$40\$ \$45\$
- Glu Pro Ala Thr Leu Lys Asp Ser Leu Glu Gln Asp Leu Asn Asn Met 50 55
- Asn Lys Phe Leu Glu Lys Leu Arg Pro Leu Ser Gly Ser Glu Ala Pro 65 70 75 80
- Arg Leu Pro Gln Asp Pro Val Gly Met Arg Arg Gln Leu Gln Glu Glu 85 90 95
- Leu Glu Glu Val Lys Ala Arg Leu Gln Pro Tyr Met Ala Glu Ala His
  100 105 110
- Glu Leu Val Gly Trp Asn Leu Glu Gly Leu Arg Gln Gln Leu Lys Pro 115 120 125
- Tyr Thr Met Asp Leu Met Glu Gln Val Ala Leu Arg Val Gln Glu Leu 130 140
- Gln Glu Gln Leu Arg Val Val Gly Glu Asp Thr Lys Ala Gln Leu Leu 145 150 155 160
- Gly Gly Val Asp Glu Ala Trp Ala Leu Leu Gln Gly Leu Gln Ser Arg 165 170 175
- Val Val His His Thr Gly Arg Phe Lys Glu Leu Phe His Pro Tyr Ala 180 185 190
- Glu Ser Leu Val Ser Gly Ile Gly Arg His Val Gln Glu Leu His Arg 195 200 205
- Ser Val Ala Pro His Ala Pro Ala Ser Pro Ala Arg Leu Ser Arg Cys 210 225
- Val Gln Val Leu Ser Arg Lys Leu Thr Leu Lys Ala Lys Ala Leu His 225 230 235 240
- Ala Arg Ile Gin Gln Asn Leu Asp Gln Leu Arg Glu Glu Leu Ile Arg 245 250 255
- Ala Phe Ala Gly Thr Gly Thr Glu Glu Gly Ala Gly Pro Asp Pro Gln 260 265 270
- Met Leu Ser Glu Glu Val Arg Gln Arg Leu Gln Ala Phe Arg Gln Asp 275 280 285
- Thr Tyr Leu Gln Ile Ala Ala Phe Thr Arg Ala Ile Asp Gln Glu Thr 290 295 300
- Glu Glu Val Gln Gln Gln Leu Ala Pro Pro Pro Pro Gly His Ser Ala 305 310 315 320
- Phe Ala Pro Glu Phe Gln Gln Thr Asp Ser Gly Lys Val Leu Ser Lys \$325\$ \$330 \$335

Leu Gln Ala Arg Leu Asp Asp Leu Trp Glu Asp Ile Thr His Ser Leu 340 345 350

His Asp Gln Gly His Ser His Leu Gly Asp Pro 355 360

<210> 2225

<211> 183

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (86)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (146)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 2225

Met Ala Val Gly Lys Phe Leu Leu Gly Ser Leu Leu Leu Leu Ser Leu 1 5 10 15

Gln Leu Gly Gln Gly Trp Gly Pro Asp Ala Arg Gly Val Pro Val Ala 20 25 30

Asp Gly Glu Phe Ser Ser Glu Gln Val Ala Lys Ala Gly Gly Thr Trp

Leu Gly Lys Asp Phe Gln Gly Pro Ser Val Thr Ser Gln Leu Ser Pro 50 55 60

Ala Leu Thr Leu Leu Thr Val Ser Ala Leu Pro Ser His Arg His Pro 65 70 75 80

Pro Pro Pro Cys Pro Xaa Ala Pro Ser Pro Val Trp Ser Met Pro Ala 85 90 95

Val Glu Pro Asp Pro Val Arg Gly Arg Ala Arg Pro Gly Leu Arg Leu 100 105 110

Ile Gly Glu Val Ile Phe Arg Tyr Cys Ala Gly Ser Cys Pro Arg Gly
115 120 125

Ala Arg Thr Gln His Gly Leu Ala Leu Ala Arg Leu Gln Gly Gln Gly 130 135 140

Arg Xaa His Gly Gly Pro Cys Cys Arg Pro Thr Arg Tyr Thr Asp Val 145 150 155 160

Ala Phe Leu Asp Asp Arg His Ala Gly Ser Gly Cys Pro Ser Ser Arg 165 170 175

Arg Leu Cys Gly Cys Gly Gly 180

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<210> 2226
<211> 252
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (86)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (135)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (146)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 2226
Met Ala Val Gly Lys Phe Leu Leu Gly Ser Leu Leu Leu Ser Leu
  1
Gln Leu Gly Gln Gly Trp Gly Pro Asp Ala Arg Gly Val Pro Val Ala
Asp Gly Glu Phe Ser Ser Glu Gln Val Ala Lys Ala Gly Gly Thr Trp
                                                  45
         35
Leu Gly Lys Asp Phe Gln Gly Pro Ser Val Thr Ser Gln Leu Ser Pro
Ala Leu Thr Leu Leu Thr Val Ser Ala Leu Pro Ser His Arg His Pro
                      70
 65
Pro Pro Pro Cys Pro Xaa Ala Pro Ser Pro Val Trp Ser Met Pro Ala
Val Glu Pro Asp Pro Val Arg Gly Arg Ala Arg Pro Gly Leu Arg Leu
                                 105
                                                     110
            100
Ile Gly Glu Xaa His Leu Pro Leu Leu Arg Arg Gln Leu Pro Pro Trp
                             120
        115
Cys Pro His Pro Ala Trp Xaa Gly Ala Gly Pro Ala Ala Gly Pro Gly
                         135
    130
Pro Xaa Pro Arg Arg Ala Leu Leu Pro Ala His Ser Leu His Arg Arg
                                         155
                     150
145
Gly Leu Pro Arg Arg Pro Pro Arg Trp Gln Arg Leu Pro Gln Leu Ser
                                   1491
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165 170 175

Ala Ala Leu Arg Leu Trp Trp Leu Arg Val Pro Gly Leu Ala Pro Arg 180 185 190

Ser Cys Ser Ala Gly Gly Ala Arg Leu Thr Tyr Leu Leu Glu Thr Trp
195 200 205

Met Gln Arg Gln Arg Gly Gly Glu Trp Ala Gly Ala Thr Ser Ser Glu 210 215 220

Cys Asn Lys Gly His His Ser Pro Gly Lys Lys Lys Lys Lys Lys Lys 235 230 240

Lys Lys Lys Lys Leu Glu Gly Gly Ser Arg Tyr \$245\$

<210> 2227

<211> 150

<212> PRT

<213> Homo sapiens

<400> 2227

Met Val Met Ile Leu Phe Val Ala Phe Ile Thr Cys Trp Glu Glu Val 1 5 10 15

Thr Thr Leu Val Gln Ala Ile Arg Ile Thr Ser Tyr Met Asn Glu Thr 20 25 30

Ile Leu Tyr Phe Pro Phe Ser Ser His Ser Ser Tyr Thr Val Arg Ser 35 40 45

Lys Lys Ile Phe Leu Ser Lys Leu Ile Val Cys Phe Leu Ser Thr Trp 50 55 60

Leu Pro Phe Val Leu Leu Gln Val Ile Ile Val Leu Leu Lys Val Gln 65 70 75 80

Ile Pro Ala Tyr Ile Glu Met Asn Ile Pro Trp Leu Tyr Phe Val Asn 85 90 95

Ser Phe Leu Ile Ala Thr Val Tyr Trp Phe Asn Cys His Lys Leu Asn 100 105 110

Leu Lys Asp Ile Gly Leu Pro Leu Asp Pro Phe Val Asn Trp Lys Cys 115 120 125

Cys Phe Ile Pro Leu Thr Ile Pro Asn Leu Glu Gln Ile Glu Lys Pro 130 135 140

Ile Ser Ile Met Ile Cys 145 150

<210> 2228

<211> 125

<212> PRT

<400> 2228

Met Ile Pro Phe Pro Ala Cys Leu Leu Leu Ala Leu Phe Pro Lys Val 1 5 10 15

Gln Val Gly Arg Thr Thr Ser Ala Tyr Phe Ser Thr Ile Pro Ser Met 20 25 30

Pro Ala Arg Ser Gln Ile Asn Leu Pro Val Glu Ser Gly Ser Ala Leu 35 40 45

Leu Glu Pro Arg Gly Lys Gly Arg Val Glu Arg Val Cys Pro Val Ala 50 55 60

Trp Ser Ser Met Val Ala Ser Cys Leu Pro Ser Pro Ser Ser Gly Gly 65 70 75 80

Pro Glu Gly Ser Leu Gly Thr Val Pro Gln Ile Leu Thr Gln Gly Pro 85 90 95

Ala Trp Gly Arg Asp Gly Cys Arg Gln Asn Ala Leu Tyr Arg Asp Phe 100 105 110

Leu Leu Gly Arg Cys Val Ser Pro Thr Ile Cys Leu 115 120 125

<210> 2229

<211> 766

<212> PRT

<213> Homo sapiens

<400> 2229

Met Ile Trp Arg Ser Arg Ala Gly Ala Glu Leu Phe Ser Leu Met Ala 1 5 10 15

Leu Trp Glu Trp Ile Ala Leu Ser Leu His Cys Trp Val Leu Ala Val 20 25 30

Ala Ala Val Ser Asp Gln His Ala Thr Ser Pro Phe Asp Trp Leu Leu 35 40 45

Ser Asp Lys Gly Pro Phe His Arg Ser Gln Glu Tyr Thr Asp Phe Val 50 60

Asp Arg Ser Arg Gln Gly Phe Ser Thr Arg Tyr Lys Ile Tyr Arg Glu 65 70 75 80

Phe Gly Arg Trp Lys Val Asn Asn Leu Ala Val Glu Arg Arg Asn Phe  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Leu Gly Ser Pro Leu Pro Leu Ala Pro Glu Phe Phe Arg Asn Ile Arg 100 105 110

Leu Leu Gly Arg Arg Pro Thr Leu Gln Gln Ile Thr Glu Asn Leu Ile 115 120 125

Lys Lys Tyr Gly Thr His Phe Leu Leu Ser Ala Thr Leu Gly Gly Glu

130 135 140

						_		_	_	_	_	~		3	3 J _
Glu 145	Ser	Leu	Thr	Ile	Phe 150	Val	Asp	Lys	Arg	Lys 155	Leu	Ser	Lys	Arg	160
Glu	Gly	Ser	Asp	Ser 165	Thr	Thr	Asn	Ser	Ser 170	Ser	Val	Thr	Leu	Glu 175	Thr
Leu	His	Gln	Leu 180	Ala	Ala	Ser	Tyr	Phe 185	Ile	Asp	Arg	Asp	Ser 190	Thr	Leu
Arg	Arg	Leu 195	His	His	Ile	Gln	Ile 200	Ala	Ser	Thr	Ala	Ile 205	Lys	Val	Thr
Glu	Thr 210	Arg	Thr	Gly	Pro	Leu 215	Gly	Cys	Ser	Asn	Tyr 220	Asp	Asn	Leu	Asp
Ser 225	Val	Ser	Ser	Val	Leu 230	Val	Gln	Ser	Pro	Glu 235	Asn	Lys	Ile	Gln	Leu 240
Gln	Gly	Leu	Gln	Val 245	Leu	Leu	Pro	Asp	Tyr 250	Leu	Gln	Glu	Arg	Phe 255	Val
Gln	Ala	Ala	Leu 260	Ser	Tyr	Ile	Ala	Cys 265	Asn	Ser	Glu	Gly	Glu 270	Phe	Ile
Cys	Lys	Glu 275	Asn	Asp	Cys	Trp	Cys 280	His	Cys	Gly	Pro	Lys 285	Phe	Pro	Glu
Cys	Asn 290	Cys	Pro	Ser	Met	Asp 295	Ile	Gln	Ala	Met	Glu 300	Glu	Asn	Leu	Leu
Arg 305	Ile	Thr	Glu	Thr	Trp 310	Lys	Ala	Tyr	Asn	Ser 315	Asp	Phe	Glu	Glu	Ser 320
Asp	Glu	Phe	Lys	Leu 325	Phe	Met	Lys	Arg	Leu 330		Met	Asn	Tyr	Phe 335	Leu
Asn	Thr	Ser	Thr 340		Met	His	Leu	Trp 345		Met	Asp	Ser	350	Phe	Glm
Arg	Arg	Tyr 355		Gln	Leu	Glu	Asn 360		Met	Lys	Gln	Leu 365		Leu	. Lys
Ala	Gln 370		Ile	Val	His	Lys 375		. Phe	e Ser	Leu	Ser 380	. Lys	Arg	Cys	His
Lys 385		. Pro	Leu	. Ile	Ser 390		Pro	Arg	g Glr	395		Ser	Thr	Tyr	Trp 400
Leu	Thr	Arg	, Ile	Gln 405	. Ser	Phe	. Leu	Туг	Cys 410		ı Glu	a Asr	ı Gly	415	Lei
Gly	Ser	Phe	Ser 420		Glu	Thr	His	Ser 425		Thr	с Сув	e Pro	430		Glr
Val	Val	. Cys 435		Ala	Phe	. Leu	440		s Thr	Val	L Gly	445		a Ser	Ala
Cve	T.e.	Thr	CVS	: A1=	Pro	Asr	Asn	Arc	Thr	. Arc	7 Cys	G1	/ Thi	. Cys	a Ası

1494

450 455 460

Thr 465	Gly	Tyr	Met	Leu	Ser 470	Gln	Gly	Leu	Cys	Lys 475	Pro	Glu	Val	Ala	Glu 480
Ser	Thr	Asp	His	Tyr 485	Ile	Gly	Phe	Glu	Thr 490	Asp	Leu	Gln	Asp	Leu 495	Glu
Met	Lys	Tyr	Leu 500	Leu	Gln	Lys	Thr	Asp 505	Arg	Arg	Ile	Glu	Val 510	His	Ala
Ile	Phe	Ile 515	Ser	Asn	Asp	Met	Arg 520	Leu	Asn	Ser	Trp	Phe 525	Asp	Pro	Ser
Trp	Arg 530	Lys	Arg	Met	Leu	Leu 535	Thr	Leu	Lys	Ser	Asn 540	Lys	Tyr	Lys	Ser
Ser 545	Leu	Val	His	Met	Ile 550	Leu	Gly	Leu	Ser	Leu 555	Gln	Ile	Cys	Leu	Thr 560
Lys	Asn	Ser	Thr	Leu 565	Glu	Pro	Val	Leu	Ala 570	Val	Tyr	Val	Asn	Pro 575	Phe
Gly	Gly	Ser	His 580	Ser	Glu	Ser	Trp	Phe 585	Met	Pro	Val	Asn	Glu 590	Asn	Ser
Phe	Pro	Asp 595		Glu	Arg	Thr	Lys 600	Leu	Asp	Leu	Pro	Leu 605	Gln	Cys	Tyr
Asn	Trp 610	Thr	Leu	Thr	Leu	Gly 615	Asn	Lys	Trp	Lys	Thr 620	Phe	Phe	Glu	Thr
Val 625	His	Ile	Tyr	Leu	Arg 630	Ser	Arg	Ile	Lys	Ser 635	Asn	Gly	Pro	Asn	Gly 640
Asn	Glu	Ser	Ile	Tyr 645	Tyr	Glu	Pro	Leu	Glu 650	Phe	Ile	Asp	Pro	Ser 655	Arg
Asn	Leu	Gly	Tyr 660		Lys	Ile	Asn	Asn 665	Ile	Gln	Val	Phe	Gly 670	Tyr	Ser
Met	His	Phe 675		Pro	Glu	Ala	11e 680		Asp	Leu	Ile	Leu 685		Leu	Asp
Tyr	Pro 690		Thr	Gln	Gly	Ser 695		. Asp	Ser	Ala	Leu 700		Gln	Leu	Leu
Glu 705		e Arg	J Asp	Arg	Val 710		. Lys	Leu	Ser	715		Gly	Gln	Arg	Arg 720
Leu	Asp	Leu	ı Ph∈	Ser 725		Leu	. Leu	Arg	730		r Leu	. Lys	. Leu	Ser 735	Thr
Ser	Glu	ı Val	Val 740		, Il∈	e Gln	ı Ser	745		ı Glr	Ala	Phe	750		. Lys
Leu	Pro	Asr 755	n Thr	. Met	: Asp	туг	760		Thr	Lys	: Leu	765		•	

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<210> 2230
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<213> Homo sapiens

<400> 2230

Met Lys Ser Ala Leu His Arg Asp Ile Cys Ile Leu Met Leu Thr Ala 1 5 10 15

Ala Leu Phe Thr Ile Ala Lys Thr Glu Lys Gln His Lys Cys Pro Ser 20 25 30

Ile Asp Glu Gln Ile Asn Asn Leu Gln Tyr Ile Cys Thr Met Glu Tyr 35 40 45

His Ser Ala Leu Gln Lys Glu Met Leu Leu Tyr Leu Gln 50 60

<210> 2231

<211> 133

<212> PRT

<213> Homo sapiens

<400> 2231

Met Arg Met Ser Leu Ala Gln Arg Val Leu Leu Thr Trp Leu Phe Thr 1 5 10 15

Leu Leu Phe Leu Ile Met Leu Val Leu Lys Leu Asp Glu Lys Ala Pro 20 25 30

Trp Asn Trp Phe Leu Ile Phe Ile Pro Val Trp Ile Phe Asp Thr Ile 35 40 45

Leu Leu Val Leu Leu Ile Val Lys Met Ala Gly Arg Cys Lys Ser Gly 50 55 60

Phe Asp Pro Arg His Gly Ser His Asn Ile Lys Lys Lys Ala Trp Tyr 65 70 75 80

Leu Ile Ala Met Leu Leu Lys Leu Ala Phe Cys Leu Ala Leu Cys Ala 85 90 95

Lys Leu Glu Gln Phe Thr Thr Met Asn Leu Ser Tyr Val Phe Ile Pro 100 105 110

Leu Trp Ala Leu Leu Ala Gly Ala Leu Thr Glu Leu Gly Tyr Asn Val

Phe Phe Val Arg Asp 130

<210> 2232

<211> 131

<212> PRT

<213> Homo sapiens

<sup>&</sup>lt;211> 61

<sup>&</sup>lt;212> PRT

 $<\!400\!>$  2232 Met Ser Leu Ala Gln Arg Val Leu Leu Thr Trp Leu Phe Thr Leu Leu

et Ser Leu Ala Gin Arg Vai Leu Leu Thr Trp Leu Phe Thr Leu Leu 1 10 15

Phe Leu Ile Met Leu Val Leu Lys Leu Asp Glu Lys Ala Pro Trp Asn 20 25 30

Trp Phe Leu Ile Phe Ile Pro Val Trp Ile Phe Asp Thr Ile Leu Leu  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ 

Val Leu Ile Val Lys Met Ala Gly Arg Cys Lys Ser Gly Phe Asp 50 55 60

Pro Arg His Gly Ser His Asn Ile Lys Lys Lys Ala Trp Tyr Leu Ile 65 70 75 80

Ala Met Leu Leu Lys Leu Ala Phe Cys Leu Ala Leu Cys Ala Lys Leu 85 90 95

Glu Gln Phe Thr Thr Met Asn Leu Ser Tyr Val Phe Ile Pro Leu Trp

Ala Leu Leu Ala Gly Ala Leu Thr Glu Leu Gly Tyr Asn Val Phe Phe 115 120 125

Val Arg Asp 130

<210> 2233

<211> 298

<212> PRT

<213> Homo sapiens

<400> 2233

Met Lys Thr Leu Gln Ser Thr Leu Leu Leu Leu Leu Leu Val Pro Leu

1 5 10 15

Ile Lys Pro Ala Pro Pro Thr Gln Gln Asp Ser Arg Ile Ile Tyr Asp 20 25 30

Tyr Gly Thr Asp Asn Phe Glu Glu Ser Ile Phe Ser Gln Asp Tyr Glu 35 40 45

Asp Lys Tyr Leu Asp Gly Lys Asn Ile Lys Glu Lys Glu Thr Val Ile 50 55 60

Ile Pro Asn Glu Lys Ser Leu Gln Leu Gln Lys Asp Glu Ala Ile Thr 65 70 75 80

Pro Leu Pro Pro Lys Lys Glu Asn Asp Glu Met Pro Thr Cys Leu Leu 85 90 95

Cys Val Cys Leu Ser Gly Ser Val Tyr Cys Glu Glu Val Asp Ile Asp 100 105 110

Ala Val Pro Pro Leu Pro Lys Glu Ser Ala Tyr Leu Tyr Ala Arg Phe 115 120 125

- Asn Lys Ile Lys Lys Leu Thr Ala Lys Asp Phe Ala Asp Ile Pro Asn 130 135 140
- Leu Arg Arg Leu Asp Phe Thr Gly Asn Leu Ile Glu Asp Ile Glu Asp 145 150 155 160
- Gly Thr Phe Ser Lys Leu Ser Leu Leu Glu Glu Leu Ser Leu Ala Glu 165 170 175
- Asn Gln Leu Leu Lys Leu Pro Val Leu Pro Pro Lys Leu Thr Leu Phe 180 185 190
- Asn Ala Lys Tyr Asn Lys Ile Lys Ser Arg Gly Ile Lys Ala Asn Ala 195 200 205
- Phe Lys Lys Leu Asn Asn Leu Thr Phe Leu Tyr Leu Asp His Asn Ala 210 215 220
- Leu Glu Ser Val Pro Leu Asn Leu Pro Glu Ser Leu Arg Val Ile His 225 230 235 240
- Leu Gln Phe Asn Asn Ile Ala Ser Ile Thr Asp Asp Thr Phe Cys Lys 245 250 255
- Ala Asn Asp Thr Ser Tyr Ile Arg Asp Arg Ile Glu Glu Ile Arg Leu 260 265 270
- Glu Gly Asn Pro Ile Val Leu Gly Lys His Pro Asn Ser Phe Ile Cys 275 280 285
- Leu Lys Arg Leu Pro Ile Gly Ser Tyr Phe 290 295

<210> 2234

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2234

- Met Ala Ala Ala Ser Ala Gly Ala Thr Arg Leu Leu Leu Leu Leu 1 5 15
- Met Ala Val Ala Ala Pro Ser Arg Ala Arg Gly Ser Gly Cys Arg Ala 20 25 30
- Gly Thr Gly Ala Arg Gly Ala Gly Ala Glu Gly Arg Glu Gly Glu Ala 35 40 45
- Cys Gly Thr Val Gly Leu Leu Glu His Ser Phe Glu Ile Asp Asp 50 60
- Ser Ala Asn Phe Arg Lys Arg Gly Ser Leu Leu Trp Asn Gln Gln Asp 65 70 75 80
- Gly Thr Leu Ser Leu Ser Gln Arg Gln Leu Ser Glu Glu Glu Arg Gly 85 90 95

Arg Leu Arg Asp Val Ala Ala Ser Tyr Leu Asp Cys Gly Ala Thr Arg 100 105 110

Ala Cys Gly Pro Leu Leu Cys Ala Thr Leu Pro Val Ser Leu Phe Lys
115 120 125

Asn Ile Asp Asp Thr Leu Lys Cys Val Asn Val Leu Lys Ser Tyr Ser 130 135 140

Phe Gln Gln Pro Lys Ala Thr Val Val Leu Ala Arg Arg Ser 145 150 155

<210> 2235

<211> 58

<212> PRT

<213> Homo sapiens

<400> 2235

Met Thr Lys Ala Leu Ile Pro Thr Pro Phe Phe Leu Ala Ala Met Trp
1 10 15

Pro Leu Trp Gln His Ser Trp Ala Gln Thr Leu Arg Ser Gln Arg Gln
20 25 30

Glu Ala Asp Ala Trp Ala Lys Ala Gly Ala Gly Asn Ser Arg Gly Ser 35 40 45

Leu Ala Trp Arg Leu Leu Met Ser Ser Gly 50

<210> 2236

<211> 71

<212> PRT

<213> Homo sapiens

<400> 2236

Met Leu Val Ala Ala Ile Val Phe Ile Ser Phe Gly Val Val Ala Ala 1 5 10 15

Phe Cys Cys Ala Ile Val Asp Gly Val Phe Ala Ala Gln His Ile Glu 20 25 30

Pro Lys Ala Pro His His Gly Lys Met Pro Val Tyr Ser Ser Gly Val 35 40 45

Gly Tyr Leu Tyr Asp Val Tyr Gln Thr Glu Val Ser Arg Ser Thr Glu
50 60

Ile His Val Gly Leu Leu Asn 65 70

<210> 2237

<211> 605

<212> PRT

## <213> Homo sapiens

<400> 2237 Met Gly Arg Leu Leu Arg Ala Ala Arg Leu Pro Pro Leu Leu Ser Pro

10

Leu Leu Leu Leu Val Gly Gly Ala Phe Leu Gly Ala Cys Val Ala 25

Gly Ser Asp Glu Pro Gly Pro Glu Gly Leu Thr Ser Thr Ser Leu Leu

Asp Leu Leu Pro Thr Gly Leu Glu Pro Leu Asp Ser Glu Glu Pro

Ser Glu Thr Met Gly Leu Gly Ala Gly Leu Gly Ala Pro Gly Ser Gly

Phe Pro Ser Glu Glu Asn Glu Glu Ser Arg Ile Leu Gln Pro Pro Gln 90

Tyr Phe Trp Glu Glu Glu Glu Leu Asn Asp Ser Ser Leu Asp Leu 105

Gly Pro Thr Ala Asp Tyr Val Phe Pro Asp Leu Thr Glu Lys Ala Gly

Ser Ile Glu Asp Thr Ser Gln Ala Gln Glu Leu Pro Asn Leu Pro Ser 135 130

Pro Leu Pro Lys Met Asn Leu Val Glu Pro Pro Trp His Met Pro Pro 150

Arg Glu Glu Glu Glu Glu Glu Glu Glu Glu Arg Glu Lys Glu 165

Glu Val Glu Lys Gln Glu Glu Glu Glu Glu Glu Leu Leu Pro Val 185

Asn Gly Ser Gln Glu Glu Ala Lys Pro Gln Val Arg Asp Phe Ser Leu 195

Thr Ser Ser Ser Gln Thr Pro Gly Ala Thr Lys Ser Arg His Glu Asp 215

Ser Gly Asp Gln Ala Ser Ser Gly Val Glu Val Glu Ser Ser Met Gly 225

Pro Ser Leu Leu Pro Ser Val Thr Pro Thr Thr Val Thr Pro Gly 250

Asp Gln Asp Ser Thr Ser Gln Glu Ala Glu Ala Thr Val Leu Pro Ala 265 260

Ala Gly Leu Gly Val Glu Phe Glu Ala Pro Gln Glu Ala Ser Glu Glu 280

Ala Thr Ala Gly Ala Ala Gly Leu Ser Gly Gln His Glu Glu Val Pro 295

Ala Leu Pro Ser Phe Pro Gln Thr Thr Ala Pro Ser Gly Ala Glu His 310 Pro Asp Glu Asp Pro Leu Gly Ser Arg Thr Ser Ala Ser Ser Pro Leu 330 325 Ala Pro Gly Asp Met Glu Leu Thr Pro Ser Ser Ala Thr Leu Gly Gln 345 Glu Asp Leu Asn Gln Gln Leu Leu Glu Gly Gln Ala Ala Glu Ala Gln Ser Arg Ile Pro Trp Asp Ser Thr Gln Val Ile Cys Lys Asp Trp Ser 375 Asn Leu Ala Gly Lys Asn Tyr Ile Ile Leu Asn Met Thr Glu Asn Ile 395 390 Asp Cys Glu Val Phe Arg Gln His Arg Gly Pro Gln Leu Leu Ala Leu 410 405 Val Glu Glu Val Leu Pro Arg His Gly Ser Gly His His Gly Ala Trp 425 His Ile Ser Leu Ser Lys Pro Ser Glu Lys Glu Gln His Leu Leu Met 440 Thr Leu Val Gly Glu Gln Gly Val Val Pro Thr Gln Asp Val Leu Ser 450 455 Met Leu Gly Asp Ile Arg Arg Ser Leu Glu Glu Ile Gly Ile Gln Asn 475 Tyr Ser Thr Thr Ser Ser Cys Gln Ala Arg Ala Ser Gln Val Arg Ser 490 485 Asp Tyr Gly Thr Leu Phe Val Val Leu Val Val Ile Gly Ala Ile Cys 505 Ile Ile Ile Ile Ala Leu Gly Leu Leu Tyr Asn Cys Trp Gln Arg Arg 515 Leu Pro Lys Leu Lys His Val Ser His Gly Glu Leu Arg Phe Val Glu Asn Gly Cys His Asp Asn Pro Thr Leu Asp Val Ala Ser Asp Ser 555 545 Gln Ser Glu Met Gln Glu Lys His Pro Ser Leu Asn Gly Gly Gly Ala 570 Leu Asn Gly Pro Gly Ser Trp Gly Ala Leu Met Gly Gly Lys Arg Asp 585 Pro Glu Asp Ser Asp Val Phe Glu Glu Asp Thr His Leu

600

<211> 432

<212> PRT

<213> Homo sapiens

<400> 2238

Met Asp Ala Arg Trp Trp Ala Val Val Leu Ala Ala Phe Pro Ser 1 5 10 15

Leu Gly Ala Gly Gly Glu Thr Pro Glu Ala Pro Pro Glu Ser Trp Thr 20 25 30

Gln Leu Trp Phe Phe Arg Phe Val Val Asn Ala Ala Gly Tyr Ala Ser 35 40 45

Phe Met Val Pro Gly Tyr Leu Leu Val Gln Tyr Phe Arg Arg Lys Asn 50 55 60

Tyr Leu Glu Thr Gly Arg Gly Leu Cys Phe Pro Leu Val Lys Ala Cys 65 70 75 80

Val Phe Gly Asn Glu Pro Lys Ala Ser Asp Glu Val Pro Leu Ala Pro 85 90 95

Arg Thr Glu Ala Ala Glu Thr Thr Pro Met Trp Gln Ala Leu Lys Leu 100 105 110

Leu Phe Cys Ala Thr Gly Leu Gln Val Ser Tyr Leu Thr Trp Gly Val 115 120 125

Leu Gln Glu Arg Val Met Thr Arg Ser Tyr Gly Ala Thr Ala Thr Ser 130 135 140

Pro Gly Glu Arg Phe Thr Asp Ser Gln Phe Leu Val Leu Met Asn Arg 145 150 155 160

Val Leu Ala Leu Ile Val Ala Gly Leu Ser Cys Val Leu Cys Lys Gln 165 170 175

Pro Arg His Gly Ala Pro Met Tyr Arg Tyr Ser Phe Ala Ser Leu Ser 180 185 190

Asn Val Leu Ser Ser Trp Cys Gln Tyr Glu Ala Leu Lys Phe Val Ser 195 200 205

Phe Pro Thr Gln Val Leu Ala Lys Ala Ser Lys Val Ile Pro Val Met 210 215 220

Leu Met Gly Lys Leu Val Ser Arg Arg Ser Tyr Glu His Trp Glu Tyr 225 230 235 240

Leu Thr Ala Thr Leu Ile Ser Ile Gly Val Ser Met Phe Leu Leu Ser 245 250 250

Ser Gly Pro Glu Pro Arg Ser Ser Pro Ala Thr Thr Leu Ser Gly Leu 260 265 270

Ile Leu Leu Ala Gly Tyr Ile Ala Phe Asp Ser Phe Thr Ser Asn Trp 275 280 285

Gln Asp Ala Leu Phe Ala Tyr Lys Met Ser Ser Val Gln Met Met Phe

290 295 300

Gly Val Asn Phe Phe Ser Cys Leu Phe Thr Val Gly Ser Leu Leu Glu 305 310 315 320

Gln Gly Ala Leu Leu Glu Gly Thr Arg Phe Met Gly Arg His Ser Glu 325 330 335

Phe Ala Ala His Ala Leu Leu Leu Ser Ile Cys Ser Ala Cys Gly Gln 340 345 350

Leu Phe Ile Phe Tyr Thr Ile Gly Gln Phe Gly Ala Ala Val Phe Thr 355 360 365

Ile Ile Met Thr Leu Arg Gln Ala Phe Ala Ile Leu Leu Ser Cys Leu 370 375 380

Leu Tyr Gly His Thr Val Thr Val Val Gly Gly Leu Gly Val Ala Val 385 390 395 400

Val Phe Ala Ala Leu Leu Leu Arg Val Tyr Ala Arg Gly Arg Leu Lys 405 410 415

Gln Arg Gly Lys Lys Ala Val Pro Val Glu Ser Pro Val Gln Lys Val 420 425 430

<210> 2239

<211> 432

<212> PRT

<213> Homo sapiens

<400> 2239

Met Asp Ala Arg Trp Trp Ala Val Val Leu Ala Ala Phe Pro Ser 1 5 10 15

Leu Gly Ala Gly Gly Glu Thr Pro Glu Ala Pro Pro Glu Ser Trp Thr 20 25 30

Gln Leu Trp Phe Phe Arg Phe Val Val Asn Ala Ala Gly Tyr Ala Ser 35 40 45

Phe Met Val Pro Gly Tyr Leu Leu Val Gln Tyr Phe Arg Arg Lys Asn 50 55 60

Tyr Leu Glu Thr Gly Arg Gly Leu Cys Phe Pro Leu Val Lys Ala Cys
65 70 75 80

Val Phe Gly Asn Glu Pro Lys Ala Ser Asp Glu Val Pro Leu Ala Pro 85 90 95

Arg Thr Glu Ala Ala Glu Thr Thr Pro Met Trp Gln Ala Leu Lys Leu 100 105 110

Leu Phe Cys Ala Thr Gly Leu Gln Val Ser Tyr Leu Thr Trp Gly Val 115 120 125

- Leu Gln Glu Arg Val Met Thr Arg Ser Tyr Gly Ala Thr Ala Thr Ser 135 Pro Gly Glu Arg Phe Thr Asp Ser Gln Phe Leu Val Leu Met Asn Arg 155 150 Val Leu Ala Leu Ile Val Ala Gly Leu Ser Cys Val Leu Cys Lys Gln 170 Pro Arg His Gly Ala Pro Met Tyr Arg Tyr Ser Phe Ala Ser Leu Ser 185 Asn Val Leu Ser Ser Trp Cys Gln Tyr Glu Ala Leu Lys Phe Val Ser Phe Pro Thr Gln Val Leu Ala Lys Ala Ser Lys Val Ile Pro Val Met 215 Leu Met Gly Lys Leu Val Ser Arg Arg Ser Tyr Glu His Trp Glu Tyr Leu Thr Ala Thr Leu Ile Ser Ile Gly Val Ser Met Phe Leu Leu Ser 250 Ser Gly Pro Glu Pro Arg Ser Ser Pro Ala Thr Thr Leu Ser Gly Leu 265 Ile Leu Leu Ala Gly Tyr Ile Ala Phe Asp Ser Phe Thr Ser Asn Trp 280 Gln Asp Ala Leu Phe Ala Tyr Lys Met Ser Ser Val Gln Met Met Phe 295 290 Gly Val Asn Phe Phe Ser Cys Leu Phe Thr Val Gly Ser Leu Leu Glu 315 Gln Gly Ala Leu Leu Glu Gly Thr Arg Phe Met Gly Arg His Ser Glu 325 . Phe Ala Ala His Ala Leu Leu Leu Ser Ile Cys Ser Ala Cys Gly Gln 345 Leu Phe Ile Phe Tyr Thr Ile Gly Gln Phe Gly Ala Ala Val Phe Thr 355 Ile Ile Met Thr Leu Arg Gln Ala Phe Ala Ile Leu Leu Ser Cys Leu 375 Leu Tyr Gly His Thr Val Thr Val Val Gly Gly Leu Gly Val Ala Val 385
  - Gln Arg Gly Lys Lys Ala Val Pro Val Glu Ser Pro Val Gln Lys Val 420 425 430

Val Phe Ala Ala Leu Leu Leu Arg Val Tyr Ala Arg Gly Arg Leu Lys

410

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<210> 2240
<211> 69
<212> PRT
<213> Homo sapiens
<400> 2240
Met Lys Ala Val Val Leu Leu Lys Ala Phe Ser Phe Ser Leu Cys Ser
Ala Ile Ser Pro Val Thr Pro Gly Phe Arg Gln Thr Ile Asn Val Leu
Asp Thr Val Ala Phe Ser Ala Phe Phe Ile Tyr Leu Phe Thr Val Thr
Ala Ser Ile Asn Phe Tyr Ala Tyr Phe Ser Ser Phe Leu Ala Gly Ala
                        55
Pro Phe Ile Lys Ile
65
<210> 2241
<211> 57
<212> PRT
<213> Homo sapiens
<400> 2241
Met Leu Asp Leu Ser Pro Ser Leu Thr Leu Lys Phe Cys Phe Leu His
Leu Val Phe Leu Pro Phe Lys Val Tyr Cys Gln Leu Leu Gln Glu Leu
Leu Ser Lys Pro Val Ser Lys Leu Pro Leu Thr Pro Gln Cys Gln Ser
Trp Ala Arg Pro Leu Gly Asp Leu Glu
     50
<210> 2242
<211> 145
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<210> 2242 <211> 145 <212> PRT <213> Homo sapiens <400> 2242

Met Leu Arg Thr Leu Val Leu Lys Gln Thr Leu Asp Leu Leu Pro 1 5 10 15

Leu Leu Glu Ala Leu Leu Val Leu Gly Val Pro Gln His Leu Glu Leu 20 25 30

Gln Pro Leu Pro Val Gln Val Ser Leu Leu Leu Leu Gln Leu Leu Asp  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ 

Leu Gly Ser Leu Lys Ser His Arg Leu His His Phe His Ser Lys Ala 50 55 60

Leu Gln Leu Pro Val Leu Asp His Leu Asp Phe Gln Asp Phe Gln Leu 65 70 75 80

Pro Trp Gln Gln Val Leu Ser Glu Leu Pro Val Ala Pro Ala Phe Gly
85 90 95

Gly Gly Ser Ser Val Ala Gly Phe Gly Ser Pro Gly Leu Thr Phe Ser 100 105 110

His Trp Leu Phe Leu Ser His Pro Val Asp Thr Phe Gly Asn Ser Gln
115 120 125

Ala Tyr Pro Thr Ser Leu Ser Ala Leu Gln Ala Ser Ile Asn Cys Asn 130 135 140

Arg 145

<210> 2243

<211> 77

<212> PRT

<213> Homo sapiens

<400> 2243

Met Ala Ile Cys Gln Phe Phe Leu Gln Gly Arg Cys Arg Phe Gly Asp 1 5 10 15

Arg Cys Trp Asn Glu His Pro Gly Ala Arg Gly Ala Gly Gly Arg 20 25 30

Gln Gln Pro Gln Gln Pro Ser Gly Asn Asn Arg Arg Gly Trp Asn 35 40 45

Thr Thr Ser Gln Arg Tyr Ser Asn Val Ile Gln Pro Ser Ser Phe Ser 50 55 60

Lys Ser Thr Pro Trp Gly Gly Ser Arg Asp Gln Glu Thr 65 70 75

<210> 2244

<211> 86

<212> PRT

<213> Homo sapiens

<400> 2244

Met Tyr Lys Leu Glu Leu Ile Phe Pro Thr Ala Leu Val Leu Pro Ile  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Leu Val Asn Gly Thr Val Ile Cys Pro Leu Lys Ala Arg Asn Ser Val 20 25 30

Ile Pro Ser Ser Ser Phe Leu Thr Ser Leu Gln Leu Thr Ile Trp Ile

45

Gln Pro Cys Leu Phe Leu Pro Thr Thr Thr Gly Leu Ser Ser Gly Tyr 50 60

His Thr Phe Leu Ser Gly Leu His Ser Cys His Ile Ser Phe Ala Thr 65 70 75 80

Ala Ile Pro Gly Cys Leu 85

<210> 2245

<211> 208

<212> PRT

<213> Homo sapiens

<400> 2245

Met Gly Leu Gly Ala Arg Gly Ala Trp Ala Ala Leu Leu Gly Thr 1 5 10 15

Leu Gl<br/>n Val Leu Ala Leu Leu Gly Ala Ala His Glu Ser Ala Ala Met<br/>  $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30 \hspace{1.5cm}$ 

Ala Ala Ser Ala Asn Ile Glu Asn Ser Gly Leu Pro His Asn Ser Ser 35 40 45

Ala Asn Ser Thr Glu Thr Leu Gln His Val Pro Ser Asp His Thr Asn 50 55 60

Glu Thr Ser Asn Ser Thr Val Lys Pro Pro Thr Ser Val Ala Ser Asp 65 70 75 80

Ser Ser Asn Thr Thr Val Thr Thr Met Lys Pro Thr Ala Ala Ser Asn  $85 \\ 90 \\ 95$ 

Thr Thr Thr Pro Gly Met Val Ser Thr Asn Met Thr Ser Thr Thr Leu 100 105 110

Lys Ser Thr Pro Lys Thr Thr Ser Val Ser Gln Asn Thr Ser Gln Ile 115 120 125

Ser Thr Ser Thr Met Thr Val Thr His Asn Ser Ser Val Thr Ser Ala 130 135 140

Ala Ser Ser Val Thr Ile Thr Thr Thr Met His Ser Glu Ala Lys Lys 145 150 155 160

Gly Ser Lys Phe Asp Thr Gly Ser Phe Val Gly Gly Ile Val Leu Thr 165 170 175

Leu Gly Val Leu Ser Ile Leu Tyr Ile Gly Cys Lys Met Tyr Tyr Ser 180 185 190

Arg Arg Gly Ile Arg Tyr Arg Thr Ile Asp Glu His Asp Ala Ile Ile 195 200 205 <210> 2246

<211> 215

<212> PRT

<213> Homo sapiens

<400> 2246

Met Arg Leu Pro Ala Trp Cys Arg His Thr Thr Leu Ala Ile Ser Cys 10

Trp His Cys Leu Val Leu Ala Arg Ala Ser Ala Asp Ser Ala Ser Leu

Pro Thr Ile Ser His Leu Gly Val Lys Pro Leu Ser Val Gly Trp Gly

Ala Pro Ser Thr Leu Pro Val Ser Pro Cys Gly Gly Lys Pro Ala Ala 55

Pro Thr Ser Ala Ser Pro Ala Ala Ala Pro Leu Arg Phe Trp Arg Pro

Gly Ala Ser Gly Gly Gly Ala Gly Gly Thr Arg Arg Leu Ala Leu Cys

Arg Leu Val Thr Ala Arg Thr Thr Leu Ala Thr Gly Thr Pro Gly Leu 105

Ser Ala Arg Pro Arg Gln Arg Pro Cys Leu Leu Pro Val Leu Pro Arg 120

Arg Pro Ala Glu Leu Ser Val Ser Leu Glu Pro Ser Pro Gly Ser Ser 135 130

Gly Arg Gly Phe Leu Cys Leu Pro Phe Cys Lys Arg Asp Ala Asp Thr 155

Ser Leu Gly Gln Thr Leu Thr Ser Ser Cys Ser Leu Ser Ser Ile Leu 170

Val Gly Gly Thr Leu Arg Pro Arg Cys Ser Cys Pro Pro Phe Thr Gln 185

Arg Ser Ala Phe His Leu Arg Thr Pro His Asn Gln Tyr His His Gly 200

Ser Thr Ser Leu Ala Ser His 210

<210> 2247

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2247

Met Lys Thr Leu Leu Leu Val Gly Leu Leu Leu Thr Trp Glu Asn

- Gly Arg Val Leu Gly Asp Gln Met Val Ser Asp Thr Glu Leu Gln Glu 20 25 30
- Met Ser Thr Glu Gly Ser Lys Tyr Ile Asn Arg Glu Ile Lys Asn Ala 35 40 45
- Leu Lys Gly Val Lys Gln Ile Lys Thr Leu Ile Glu Gln Thr Asn Glu 50 55 60
- Glu Arg Lys Ser Leu Leu Thr Asn Leu Glu Glu Ala Lys Lys Lys 65 70 75 80
- Glu Asp Ala Leu Asn Asp Thr Lys Asp Ser Glu Met Lys Leu Lys Ala 85 90 95
- Ser Gln Gly Val Cys Asn Asp Thr Met Met Ala Leu Trp Glu Glu Cys
- Lys Pro Cys Leu Lys Gln Thr Trp Gly Lys Gly Leu Arg Pro Ser Leu 115 120 125
- Gln Lys Gln His Arg Ala Gly Trp Pro Pro Gly 130 135

<210> 2248

<211> 363

<212> PRT

<213> Homo sapiens

<400> 2248

- Met Lys Thr Leu Leu Leu Leu Val Gly Leu Leu Leu Thr Trp Glu Asn 1 5 10 15
- Gly Arg Val Leu Gly Asp Gln Met Val Ser Asp Thr Glu Leu Gln Glu 20 25 30
- Met Ser Thr Glu Gly Ser Lys Tyr Ile Asn Arg Glu Ile Lys Asn Ala 35 40 45
- Leu Lys Gly Val Lys Gln Ile Lys Thr Leu Ile Glu Gln Thr Asn Glu 50 60
- Glu Arg Lys Ser Leu Leu Thr Asn Leu Glu Glu Ala Lys Lys Lys 65 70 75 80
- Glu Asp Ala Leu Asn Asp Thr Lys Asp Ser Glu Met Lys Leu Lys Ala 85 90 95
- Ser Gln Gly Val Cys Asn Asp Thr Met Met Ala Leu Trp Glu Glu Cys 100 105 110
- Lys Pro Cys Leu Lys Gln Thr Cys Met Lys Phe Tyr Ala Arg Val Cys
  115 120 125
- Arg Ser Ser Thr Gly Leu Val Gly His Gln Val Glu Glu Phe Leu Asn 130 135 140

Gln Ser Ser Pro Phe Tyr Phe Trp Ile Asn Gly Asp Arg Ile Asp Ser 145 150 155 160

Leu Leu Glu Asn Asp Arg Gln Gln Thr His Ala Leu Asp Val Met Gln 165 170 175

Asp Ser Phe Asp Arg Ala Ser Ser Ile Met Asp Glu Leu Phe Gln Asp 180 185 190

Arg Phe Phe Thr Arg Glu Ala Gln Asp Pro Phe His Phe Ser Pro Phe 195 200 205

Ser Ser Phe Gln Arg Arg Pro Phe Phe Phe Asn Ile Lys His Arg Phe 210 215 220

Ala Arg Asn Ile Met Pro Phe Pro Gly Tyr Gln Pro Leu Asn Phe His 225 230 235 240

Asp Met Phe Gln Pro Phe Phe Asp Met Ile His Gln Ala Gln Gln Ala 245 250 255

Met Asp Val Asn Leu His Arg Leu Pro His Phe Pro Met Glu Phe Thr 260 265 270

Glu Glu Asp Asn Gln Asp Gly Ala Val Cys Lys Glu Ile Arg His Asn 275 280 285

Ser Thr Gly Cys Leu Lys Met Lys Asp Gln Cys Glu Lys Cys Arg Glu 290 295 300

Ile Leu Ser Val Asp Cys Ser Ser Asn Asn Pro Ala Gln Val Gln Leu 305 310 315 320

Arg Gln Glu Leu Asn Asn Ser Leu Gln Ile Ala Glu Lys Phe Thr Lys 325 330 335

Leu Val Arg Arg Ala Ala Ala Val Leu Pro Gly Glu Asp Val Gln His 340 345 350

Val Leu Pro Ala Glu Ala Ala Gly Arg Ala Val 355 360

<210> 2249

<211> 85

<212> PRT

<213> Homo sapiens

<400> 2249

Met Ala Ala Gly Gly Cys Leu Leu Leu Leu Ala Phe Phe Pro Leu Ser 1 5 10 15

Arg Gly Ser His Phe His Leu Gln Lys Arg Ala Leu Ala Glu Ala Ser 20 25 30

Phe Glu Ala Thr Leu Cys Glu Leu Phe Val Ile Glu Thr Ala Ser Lys 35 40 45 Gly Thr Leu Leu Ile Ile Thr Ile Arg His Leu Val Thr Tyr Ile Ile 50 60

Val Ile Phe Lys Cys His Met Leu Lys Asn Glu Met Asn Ser Ser Ile
65 70 75 80

Lys Pro His Phe Gln 85

<210> 2250

<211> 184

<212> PRT

<213> Homo sapiens

<400> 2250

Met Lys Ala Leu Gly Ala Val Leu Leu Ala Leu Leu Cys Gly Arg
1 5 10 15

Pro Gly Arg Gly Gln Thr Gln Gln Glu Glu Glu Glu Glu Asp Glu Asp 20 25 30

His Gly Pro Asp Asp Tyr Asp Glu Glu Asp Glu Asp Glu Val Glu Glu 35 40 45

Glu Glu Thr Asn Arg Leu Pro Gly Gly Arg Ser Arg Val Leu Leu Arg 50 55 60

Cys Tyr Thr Cys Lys Ser Leu Pro Arg Asp Glu Arg Cys Asn Leu Thr 65 70 75 80

Gln Asn Cys Ser His Gly Gln Thr Cys Thr Thr Leu Ile Ala His Gly 85 90 95

Asn Thr Glu Ser Gly Leu Leu Thr Thr His Ser Thr Trp Cys Thr Asp 100 105 110

Ser Cys Gln Pro Ile Thr Lys Thr Val Glu Gly Thr Gln Val Thr Met 115 120 125

Thr Cys Cys Gln Ser Ser Leu Cys Asn Val Pro Pro Trp Gln Ser Ser 130 135 140

Arg Val Gln Asp Pro Thr Gly Lys Gly Ala Gly Gly Pro Arg Gly Ser 145 150 155 160

Ser Glu Thr Val Gly Ala Ala Leu Leu Leu Asn Leu Leu Ala Gly Leu 165 170 175

Gly Ala Met Gly Ala Arg Arg Pro 180

<210> 2251

<211> 352

<212> PRT

<213> Homo sapiens

Val Ala Thr Ala Asn Pro Ala Arg Cys Leu Ala Leu Asn Val Ser Leu 20 25 30

Arg Glu Trp Thr Ala Arg Tyr Gly Ala Ala Pro Ala Ala Pro Arg Cys 35 40 45

Asp Ala Leu Asp Gly Asp Ala Val Val Leu Leu Arg Ala Arg Asp Leu 50 55 60

Phe Asn Leu Ser Ala Pro Leu Ala Arg Pro Val Gly Thr Ser Leu Phe 65 70 75 80

Leu Gln Thr Ala Leu Arg Gly Trp Ala Val Gln Leu Leu Asp Leu Thr 85 90 95

Phe Ala Ala Arg Gln Pro Pro Leu Ala Thr Ala His Ala Arg Trp
100 105 110

Lys Ala Glu Arg Glu Gly Arg Ala Arg Arg Ala Ala Leu Leu Arg Ala 115 120 125

Leu Gly Ile Arg Leu Val Ser Trp Glu Gly Gly Arg Leu Glu Trp Phe 130 135 140

Gly Cys Asn Lys Glu Thr Thr Arg Cys Phe Gly Thr Val Val Gly Asp 145 150 155 160

Thr Pro Ala Tyr Leu Tyr Glu Glu Arg Trp Thr Pro Pro Cys Cys Leu 165 170 175

Arg Ala Leu Arg Glu Thr Ala Arg Tyr Val Val Gly Val Leu Glu Ala 180 185 190

Ala Gly Val Arg Tyr Trp Leu Glu Gly Gly Ser Leu Leu Gly Ala Ala 195 200 205

Arg His Gly Asp Ile Ile Pro Trp Asp Tyr Asp Val Asp Leu Gly Ile 210 215 220

Tyr Leu Glu Asp Val Gly Asn Cys Glu Gln Leu Arg Gly Ala Glu Ala 225 230 235 240

Gly Ser Val Val Asp Glu Arg Gly Phe Val Trp Glu Lys Ala Val Glu 245 250 255

Gly Asp Phe Phe Arg Val Gln Tyr Ser Glu Ser Asn His Leu His Val 260 265 270

Asp Leu Trp Pro Phe Tyr Pro Arg Asn Gly Val Met Thr Lys Asp Thr 275 280 285

Trp Leu Asp His Arg Gln Asp Val Glu Phe Pro Glu His Phe Leu Gln 290 295 300

Pro Leu Val Pro Leu Pro Phe Ala Gly Phe Val Ala Gln Ala Pro Asn 305 310 315 320

Asn Tyr Arg Arg Phe Leu Glu Leu Lys Phe Gly Pro Gly Val Ile Glu 325 330 335

Asn Pro Gln Tyr Pro Asn Pro Ala Leu Leu Ser Leu Thr Gly Ser Gly 340 345 350

<210> 2252

<211> 448

<212> PRT

<213> Homo sapiens

<400> 2252

Met Ala Trp Ala Ser Arg Leu Gly Leu Leu Leu Ala Leu Leu Leu Pro 1 5 10 15

Val Val Gly Ala Ser Thr Pro Gly Thr Val Val Arg Leu Asn Lys Ala 20 25 30

Ala Leu Ser Tyr Val Ser Glu Ile Gly Lys Ala Pro Leu Gln Arg Ala 35 40 45

Leu Gln Val Thr Val Pro His Phe Leu Asp Trp Ser Gly Glu Ala Leu 50 55 60

Gln Pro Thr Arg Ile Arg Ile Leu Asn Val His Val Pro Arg Leu His 65 70 75 80

Leu Lys Phe Ile Ala Gly Phe Gly Val Arg Leu Leu Ala Ala Ala Asn 85 90 95

Phe Thr Phe Lys Val Phe Arg Ala Pro Glu Pro Leu Glu Leu Thr Leu 100 105 110

Pro Val Glu Leu Leu Ala Asp Thr Arg Val Thr Gln Ser Ser Ile Arg 115 120 125

Thr Pro Val Val Ser Ile Ser Ala Cys Ser Leu Phe Ser Gly His Ala 130 135 140

Asn Glu Phe Asp Gly Ser Asn Ser Thr Ser His Ala Leu Leu Val Leu 145 150 155 160

Val Gln Lys His Ile Lys Ala Val Leu Ser Asn Lys Leu Cys Leu Ser 165 170 175

Ile Ser Asn Leu Val Gln Gly Val Asn Val His Leu Gly Thr Leu Ile 180 185 190

Gly Leu Asn Pro Val Gly Pro Glu Ser Gln Ile Arg Tyr Ser Met Val 195 200 205

Ser Val Pro Thr Val Thr Ser Asp Tyr Ile Ser Leu Glu Val Asn Ala 210 215 220

Val Leu Phe Leu Leu Gly Lys Pro Ile Ile Leu Pro Thr Asp Ala Thr 225 230 235 240

Pro Phe Val Leu Pro Arg His Val Gly Thr Glu Gly Ser Met Ala Thr 245 250 255

Val Gly Leu Ser Gln Gln Leu Phe Asp Ser Ala Leu Leu Leu Gln 260 265 270

Lys Ala Gly Ala Leu Asn Leu Asp Ile Thr Gly Gln Leu Arg Ser Asp 275 280 285

Asp Asn Leu Leu Asn Thr Ser Ala Leu Gly Arg Leu Ile Pro Glu Val 290 295 300

Ala Arg Gln Phe Pro Glu Pro Met Pro Val Val Leu Lys Val Arg Leu 305 310 315 320

Gly Ala Thr Pro Val Ala Met Leu His Thr Asn Asn Ala Thr Leu Arg 325 330 335

Leu Gln Pro Phe Val Glu Val Leu Ala Thr Ala Ser As<br/>n Ser Ala Phe 340 345 350

Gln Ser Leu Phe Ser Leu Asp Val Val Val Asn Leu Arg Leu Gln Leu 355 360 365

Ser Val Ser Lys Val Lys Leu Gln Gly Thr Thr Ser Val Leu Gly Asp 370 380

Val Gln Leu Thr Val Ala Ser Ser Asn Val Gly Phe Ile Asp Thr Asp 385 390 395 400

Gln Val Arg Thr Leu Met Gly Thr Val Phe Glu Lys Pro Leu Leu Asp \$405\$

His Leu Asn Ala Leu Leu Ala Met Gly Ile Ala Leu Pro Gly Val Val  $420 \hspace{1.5cm} 425 \hspace{1.5cm} 430 \hspace{1.5cm}$ 

Asn Leu His Tyr Val Pro Leu Arg Ser Leu Ser Met Arg Ala Thr Trp 435 440 445

<210> 2253

<211> 183

<212> PRT

<213> Homo sapiens

<400> 2253

Met Glu Pro Glu Glu Gly Thr Pro Leu Trp Arg Leu Gln Lys Leu Pro 1 5 10 15

Ala Glu Leu Gly Pro Gln Leu Leu His Lys Ile Ile Asp Gly Ile Cys
20 25 30

Gly Arg Ala Tyr Pro Val Tyr Gln Asp Tyr His Thr Val Trp Glu Ser

35 40 45

Glu Glu Trp Met His Val Leu Glu Asp Ile Ala Lys Phe Phe Lys Ala 50 60

Ile Val Gly Lys Asn Leu Pro Asp Glu Glu Ile Phe Gln Gln Leu Asn 65 70 75 80

Gln Leu Asn Ser Leu His Gln Glu Thr Ile Met Lys Cys Val Lys Ser 85 90 95

Arg Lys Asp Glu Ile Lys Gln Ala Leu Ser Arg Glu Ile Val Ala Ile 100 105 110

Ser Ser Ala Gln Leu Gln Asp Phe Asp Trp Gln Val Lys Leu Ala Leu 115 120 125

Ser Ser Asp Lys Ile Ala Ala Leu Arg Met Pro Leu Leu Ser Leu His 130 135 140

Leu Asp Val Lys Glu Asn Gly Glu Val Lys Pro Tyr Ser Ile Glu Met 145 150 155 160

Ser Arg Glu Glu Leu Gln Asn Leu Ile Gln Ser Leu Glu Ala Ala Asn 165 170 175

Lys Val Val Leu Gln Leu Lys 180

<210> 2254

<211> 121

<212> PRT

<213> Homo sapiens

<400> 2254

Met Pro Cys Gly Arg Gln His Leu Gln Asn Leu Asp Asp Ala Val Asn 1 5 10 15

Gly Ser Ala Trp Thr Ile Leu Leu Leu Thr Glu Asn Phe Leu Arg Asp 20 25 30

Thr Trp Cys Asn Phe Gln Phe Tyr Thr Ser Leu Met Asn Ser Val Asn 35 40 45

Arg Gln His Lys Tyr Asn Ser Val Ile Pro Met Arg Pro Leu Asn Asn 50 55 60

Pro Leu Pro Arg Glu Arg Thr Pro Phe Ala Leu Gln Thr Ile Asn Ala 65 70 75 80

Leu Glu Glu Glu Ser Arg Gly Phe Pro Thr Gln Val Glu Arg Ile Phe 85 90 95

Gln Glu Ser Val Tyr Lys Thr Gln Gln Thr Ile Trp Lys Glu Thr Arg 100 105 110

Asn Met Val Gln Arg Gln Phe Ile Ala 115 120 <210> 2255

<211> 251

<212> PRT

<213> Homo sapiens

<400> 2255

Met Leu Phe His Tyr Asp Trp Ile Ser Ile Pro Leu Val Tyr Thr Gln 1 5 10 15

Val Val Thr Ile Ala Val Tyr Ser Phe Phe Ala Leu Ser Leu Val Gly
20 25 30

Arg Gln Phe Val Glu Pro Glu Ala Gly Ala Ala Lys Pro Gln Lys Leu 35 40 45

Leu Lys Pro Gly Gln Glu Pro Ala Pro Ala Leu Gly Asp Pro Asp Met 50 55 60

Tyr Val Pro Leu Thr Thr Leu Leu Gln Phe Phe Phe Tyr Ala Gly Trp 65 70 75 80

Leu Lys Val Ala Glu Gln Ile Ile Asn Pro Phe Gly Glu Asp Asp Asp 85 90 95

Asp Phe Glu Thr Asn Gln Leu Ile Asp Arg Asn Leu Gln Val Ser Leu 100 105 110

Leu Ser Val Asp Glu Met Tyr Gln Asn Leu Pro Pro Ala Glu Lys Asp 115 120 125

Gln Tyr Trp Asp Glu Asp Gln Pro Gln Pro Pro Tyr Thr Val Ala Thr 130 135 140

Ala Ala Glu Ser Leu Arg Pro Ser Phe Leu Gly Ser Thr Phe Asn Leu 145 150 155 160

Arg Met Ser Asp Asp Pro Glu Gln Ser Leu Gln Val Glu Ala Ser Pro
165 170 175

Gly Ser Gly Arg Pro Ala Pro Ala Ala Gln Thr Pro Leu Leu Gly Arg 180 185 190

Phe Leu Gly Val Gly Ala Pro Ser Pro Ala Ile Ser Leu Arg Asn Phe 195 200 205

Gly Arg Val Arg Gly Thr Pro Arg Pro Pro His Leu Leu Arg Phe Arg 210 215 220

Ala Glu Glu Gly Gly Asp Pro Glu Ala Ala Ala Arg Ile Glu Glu 225 230 235 240

Ser Ala Glu Ser Gly Asp Glu Ala Leu Glu Pro 245 250 <211> 125

<212> PRT

<213> Homo sapiens

<400> 2256

Met Arg Pro Gly Lys Lys Val Leu Val Met Gly Ile Val Asp Leu Asn 1 5 10

Pro Glu Ser Phe Ala Ile Ser Leu Thr Cys Gly Asp Ser Glu Asp Pro 20 25 30

Pro Ala Asp Val Ala Ile Glu Leu Lys Ala Val Phe Thr Asp Arg Gln 35 40 . 45

Leu Leu Arg Asn Ser Cys Ile Ser Gly Glu Arg Gly Glu Glu Gln Ser 50 55 60

Ala Ile Pro Tyr Phe Pro Phe Ile Pro Asp Gln Pro Phe Arg Val Glu 65 70 75 80

Ile Leu Cys Glu His Pro Arg Phe Arg Val Phe Val Asp Gly His Gln 85 90 95

Leu Phe Asp Phe Tyr His Arg Ile Gln Thr Leu Ser Ala Ile Asp Thr 100 105 110

Ile Lys Ile Asn Gly Asp Leu Gln Ile Thr Lys Leu Gly 115 120 125

<210> 2257

<211> 170

<212> PRT

<213> Homo sapiens

<400> 2257

Met Ile Ser Ile His Asn Glu Glu Glu Asn Ala Phe Ile Leu Asp Thr 1 5 10 15

Leu Lys Lys Gln Trp Lys Gly Pro Asp Asp Ile Leu Leu Gly Met Phe 20 25 30

Tyr Asp Thr Asp Asp Ala Ser Phe Lys Trp Phe Asp Asn Ser Asn Met 35 40 45

Thr Phe Asp Lys Trp Thr Asp Gln Asp Asp Glu Asp Leu Val Asp 50 55 60

Thr Cys Ala Phe Leu His Ile Lys Thr Gly Glu Trp Lys Lys Gly Asn 65 70 75 80

Cys Glu Val Ser Ser Val Glu Gly Thr Leu Cys Lys Thr Ala Ile Pro 85 90 95

Tyr Lys Arg Lys Tyr Leu Ser Asp Asn His Ile Leu Ile Ser Ala Leu 100 105 110

Val Ile Ala Ser Thr Val Ile Leu Thr Val Leu Gly Ala Ile Ile Trp
115 120 125

Phe Leu Tyr Lys Lys His Ser Asp Ser Arg Phe Thr Thr Val Phe Ser 130 135 140

Thr Ala Pro Gln Ser Pro Tyr Asn Glu Asp Cys Val Leu Val Val Gly 145 150 155 160

Glu Glu Asn Glu Tyr Pro Val Gln Phe Asp 165 170

<210> 2258

<211> 595

<212> PRT

<213> Homo sapiens

<400> 2258

Met Leu Leu Leu Leu Leu Leu Pro Pro Leu Leu Cys Gly Arg Val

Gly Ala Lys Glu Gln Lys Asp Tyr Leu Leu Thr Met Gln Lys Ser Val 20 25 30

Thr Val Gln Glu Gly Leu Cys Val Ser Val Leu Cys Ser Phe Ser Tyr 35 40 45

Pro Gln Asn Gly Trp Thr Ala Ser Asp Pro Val His Gly Tyr Trp Phe 50 55 60

Arg Ala Gly Asp His Val Ser Arg Asn Ile Pro Val Ala Thr Asn Asn 65 70 75 80

Pro Ala Arg Ala Val Glu Glu Thr Arg Asp Arg Phe His Leu Leu 85 90 95

Gly Asp Pro Gln Asn Lys Asp Cys Thr Leu Ser Ile Arg Asp Thr Arg 100 105 110

Glu Ser Asp Ala Gly Thr Tyr Val Phe Cys Val Glu Arg Gly Asn Met 115 120 125

Lys Trp Asn Tyr Lys Tyr Asp Gln Leu Ser Val Asn Val Thr Ala Ser 130 135 140

Gln Asp Leu Leu Ser Arg Tyr Arg Leu Glu Val Pro Glu Ser Val Thr 145 150 155 160

Val Gln Glu Gly Leu Cys Val Ser Val Pro Cys Ser Val Leu Tyr Pro
165 170 175

His Tyr Asn Trp Thr Ala Ser Ser Pro Val Tyr Gly Ser Trp Phe Lys 180 185 190

Glu Gly Ala Asp Ile Pro Trp Asp Ile Pro Val Ala Thr Asn Thr Pro 195 200 205

Ser Gly Lys Val Gln Glu Asp Thr His Gly Arg Phe Leu Leu Gly 210 215 220

Asp Pro Gln Thr Asn Asn Cys Ser Leu Ser Ile Arg Asp Ala Arg Lys 230 Gly Asp Ser Gly Lys Tyr Tyr Phe Gln Val Glu Arg Gly Ser Arg Lys 250 Trp Asn Tyr Ile Tyr Asp Lys Leu Ser Val His Val Thr Ala Leu Thr His Met Pro Thr Phe Ser Ile Pro Gly Thr Leu Glu Ser Gly His Pro Arg Asn Leu Thr Cys Ser Val Pro Trp Ala Cys Glu Gln Gly Thr Pro 295 Pro Thr Ile Thr Trp Met Gly Ala Ser Val Ser Ser Leu Asp Pro Thr Ile Thr Arg Ser Ser Met Leu Ser Leu Ile Pro Gln Pro Gln Asp His 330 Gly Thr Ser Leu Thr Cys Gln Val Thr Leu Pro Gly Ala Gly Val Thr Met Thr Arg Ala Val Arg Leu Asn Ile Ser Tyr Pro Pro Gln Asn Leu Thr Met Thr Val Phe Gln Gly Asp Gly Thr Ala Ser Thr Thr Leu Arg 370 Asn Gly Ser Ala Leu Ser Val Leu Glu Gly Gln Ser Leu His Leu Val 390 Cys Ala Val Asp Ser Asn Pro Pro Ala Arg Leu Ser Trp Thr Trp Gly 405 Ser Leu Thr Leu Ser Pro Ser Gln Ser Ser Asn Leu Gly Val Leu Glu 425 Leu Pro Arg Val His Val Lys Asp Glu Gly Glu Phe Thr Cys Arg Ala 435 Gln Asn Pro Leu Gly Ser Gln His Ile Ser Leu Ser Leu Ser Leu Gln 455 Asn Glu Tyr Thr Gly Lys Met Arg Pro Ile Ser Gly Val Thr Leu Gly 470 465 Ala Phe Gly Gly Ala Gly Ala Thr Ala Leu Val Phe Leu Tyr Phe Cys Ile Ile Phe Val Val Val Arg Ser Cys Arg Lys Lys Ser Ala Arg Pro 500 Ala Val Gly Val Gly Asp Thr Gly Met Glu Asp Ala Asn Ala Val Arg 520

Gly Ser Ala Ser Gln Gly Pro Leu Ile Glu Ser Pro Ala Asp Asp Ser

535

530

Pro Pro His His Ala Pro Pro Ala Leu Ala Thr Pro Ser Pro Glu Glu 545 550 555 560

Gly Glu Ile Gln Tyr Ala Ser Leu Ser Phe His Lys Ala Arg Pro Gln 565 570 575

Tyr Pro Gln Glu Gln Glu Ala Ile Gly Tyr Glu Tyr Ser Glu Ile Asn 580 585 590

Ile Pro Lys 595

<210> 2259

<211> 274

<212> PRT

<213> Homo sapiens

<400> 2259

Met Ser Ser Asn Gly Ile Pro Glu Cys Tyr Ala Glu Glu Asp Glu Phe 1 5 10 15

Ser Gly Leu Glu Thr Asp Thr Ala Val Pro Thr Glu Glu Ala Tyr Val 20 25 30

Ile Tyr Asp Glu Asp Tyr Glu Phe Glu Thr Ser Arg Pro Pro Thr Thr 35 40 45

Thr Glu Pro Ser Thr Thr Ala Thr Thr Pro Arg Val Ile Pro Glu Glu 50 55 60

Gly Ala Ile Ser Ser Phe Pro Glu Glu Glu Phe Asp Leu Ala Gly Arg
65 70 75 80

Lys Arg Phe Val Ala Pro Tyr Val Thr Tyr Leu Asn Lys Asp Pro Ser 85 90 95

Ala Pro Cys Ser Leu Thr Asp Ala Leu Asp His Phe Gln Val Asp Ser 100 105 110

Leu Asp Glu Ile Ile Pro Asn Asp Leu Lys Lys Ser Asp Leu Pro Pro 115 120 125

Gln His Ala Pro Arg Asn Ile Thr Val Val Ala Val Glu Gly Cys His 130 135 140

Ser Phe Val Ile Val Asp Trp Asp Lys Ala Thr Pro Gly Asp Val Val 145 150 155 160

Thr Gly Tyr Leu Val Tyr Ser Ala Ser Tyr Glu Asp Phe Ile Arg Asn 165 170 175

Lys Trp Ser Thr Gln Ala Ser Ser Val Thr His Leu Pro Ile Glu Asn 180 185 190

Leu Lys Pro Asn Thr Arg Tyr Tyr Phe Lys Val Gln Ala Gln Asn Pro 195 200 205

His Gly Tyr Gly Pro Ile Ser Pro Ser Val Ser Phe Val Thr Glu Ser

210 215 220

Asp Asn Pro Leu Leu Val Val Arg Pro Pro Gly Gly Glu Pro Ile Trp 225 230 235 240

Ile Pro Phe Ala Phe Lys His Asp Pro Ser Tyr Thr Asp Cys His Gly
245 250 255

Arg Gln Tyr Val Lys Arg Thr Leu Val Ser Lys Val Arg Gly Ser Trp 260 265 270

Ser Leu

<210> 2260

<211> 468

<212> PRT

<213> Homo sapiens

<400> 2260

Met Pro Ala Leu His Thr Leu Asn Leu Asp His Asn Leu Ile Asp Ala 1 5 10 15

Leu Pro Pro Gly Ala Phe Ala Gln Leu Gly Gln Leu Ser Arg Leu Asp  $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$ 

Leu Thr Ser Asn Arg Leu Ala Thr Leu Ala Pro Asp Pro Leu Phe Ser 35 40 45

Arg Gly Arg Asp Ala Glu Ala Ser Pro Ala Pro Leu Val Leu Ser Phe 50 55 60

Ser Gly Asn Pro Leu His Cys Asn Cys Glu Leu Leu Trp Leu Arg Arg 65 70 75 80

Leu Ala Arg Pro Asp Asp Leu Glu Thr Cys Ala Ser Pro Pro Gly Leu 85 90 95

Ala Gly Arg Tyr Phe Trp Ala Val Pro Glu Gly Glu Phe Ser Cys Glu 100 105 110

Pro Pro Leu Ile Ala Arg His Thr Gln Arg Leu Trp Val Leu Glu Gly 115 120 125

Gln Arg Ala Thr Leu Arg Cys Arg Ala Leu Gly Asp Pro Ala Pro Thr 130 135 140

Met His Trp Val Gly Pro Asp Asp Arg Leu Val Gly Asn Ser Ser Arg 145 150 155 160

Ala Arg Ala Phe Pro Asn Gly Thr Leu Glu Ile Gly Ala Thr Gly Ala 165 170 175

Gly Asp Ala Gly Gly Tyr Thr Cys Ile Ala Thr Asn Pro Ala Gly Glu
180 185 190

Ala Thr Ala Arg Val Glu Leu Arg Val Leu Ala Leu Pro His Gly Gly 195 200 205

Asn Ser Ser Ala Glu Gly Gly Arg Pro Gly Pro Ser Asp Ile Ala Ala 210 215 220

Ser Ala Arg Thr Ala Ala Glu Gly Glu Gly Thr Leu Glu Ser Glu Pro 225 230 235 240

Ala Val Gln Val Thr Glu Val Thr Ala Thr Ser Gly Leu Val Ser Trp
245 250 255

Gly Pro Gly Arg Pro Ala Asp Pro Val Trp Met Phe Gln Ile Gln Tyr 260 265 270

Asn Ser Ser Glu Asp Glu Thr Leu Ile Tyr Arg Ile Val Pro Ala Ser 275 280 285

Ser His His Phe Leu Leu Lys His Leu Val Pro Gly Ala Asp Tyr Asp 290 295 300

Leu Cys Leu Leu Ala Leu Ser Pro Ala Ala Gly Pro Ser Asp Leu Thr 305 310 315 320

Ala Thr Arg Leu Leu Gly Cys Ala His Phe Ser Thr Leu Pro Ala Ser 325 330 335

Pro Leu Cys His Ala Leu Gln Ala His Val Leu Gly Gly Thr Leu Thr 340 345 350

Val Ala Val Gly Gly Val Leu Val Ala Ala Leu Leu Val Phe Thr Val 355 360 365

Ala Leu Leu Val Arg Gly Arg Gly Ala Gly Asn Gly Arg Leu Pro Leu 370 375 380

Lys Leu Ser His Val Gln Ser Gln Thr Asn Gly Gly Pro Ser Pro Thr 385 390 395 400

Pro Lys Ala His Pro Pro Arg Ser Pro Pro Pro Arg Pro Gln Arg Ser 405 410 415

Cys Ser Leu Asp Leu Gly Asp Ala Gly Cys Tyr Gly Tyr Ala Arg Arg 420 425 430

Leu Gly Gly Ala Trp Ala Arg Arg Ser His Ser Val His Gly Gly Leu
435 440 445

Leu Gly Ala Gly Cys Arg Gly Val Gly Gly Ser Ala Glu Arg Leu Glu 450 460

Glu Ser Val Val 465

<210> 2261

<211> 86

<212> PRT

<213> Homo sapiens

<400> 2261

Met Asn Arg Gly Asp Phe Leu Leu Ser Val Asn Gly Ala Ser Leu Ala 1 10 15

Gly Leu Ala His Gly Asn Val Leu Lys Val Leu His Gln Ala Gln Leu
20 25 30

His Lys Asp Ala Leu Val Val Ile Lys Lys Gly Met Asp Gln Pro Arg 35 40 45

Pro Ser Ala Arg Gln Glu Pro Pro Thr Ala Asn Gly Lys Gly Leu Leu 50 60

Ser Arg Lys Thr Ile Pro Leu Glu Pro Gly Ile Gly Lys Met Ile Ile 65 70 75 80

Ser Thr Thr Ser Arg Leu 85

<210> 2262

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2262

Met Lys Gly Ser Arg Ala Leu Leu Leu Val Ala Leu Thr Leu Phe Cys 1 5 10 15

Ile Cys Arg Met Ala Thr Gly Glu Asp Asn Asp Glu Phe Phe Met Asp 20 25 30

Phe Leu Gln Thr Leu Leu Val Gly Thr Pro Glu Glu Leu Tyr Glu Gly 35 40 45

Thr Leu Gly Lys Tyr Asn Val Asn Glu Asp Ala Lys Ala Ala Met Thr 50 60

Glu Leu Lys Ser Cys Ile Asp Gly Leu Gln Pro Met His Lys Ala Glu 65 70 75 80

Leu Val Lys Leu Val Gl<br/>n Val Leu Gly Ser Gl<br/>n Asp Gly Ala Gly 85 90 95

Thr Asp Tyr Lys Asp Asp Asp Asp Lys 100 105

<210> 2263

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2263

Met Ala Ala Ser Val Cys Ser Gly Leu Leu Gly Pro Arg Val Leu Ser 1 10 15

Trp Ser Arg Glu Leu Pro Cys Ala Trp Arg Ala Leu His Thr Ser Pro  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Val Cys Ala Lys Asn Arg Ala Ala Arg Val Arg Val Ser Lys Gly Asp 35 40 45

Lys Pro Val Thr Tyr Glu Glu Ala His Ala Pro His Tyr Ile Ala His 50 55 60

Arg Lys Gly Trp Leu Ser Leu His Thr Gly Asn Leu Asp Gly Glu Asp 65 70 75 80

His Ala Ala Glu Arg Thr Val Glu Asp Val Phe Leu Arg Lys Phe Met 85 90 95

Trp Gly Thr Phe Pro Gly Cys Leu Ala Asp Gln Leu Val Leu Lys Arg
100 105 110

Arg Gly Asn Gln Leu Glu Ile Cys Ala Val Val Leu Arg Gln Leu Ser 115 120 125

Pro His Lys Tyr Tyr Phe Leu Val Gly Tyr Ser Glu Thr Leu Leu Ser 130 135 140

Tyr Phe Tyr Lys Cys Pro Val Arg Leu His Leu Gln Thr Val Pro Ser 145 150 155 160

Lys Val Val Tyr Lys Tyr Leu 165

<210> 2264

<211> 203

<212> PRT

<213> Homo sapiens

<400> 2264

Met Ala Arg Pro Arg Pro Arg Glu Tyr Lys Ala Gly Asp Leu Val Phe 1 5 10 15

Ala Lys Met Lys Gly Tyr Pro His Trp Pro Ala Arg Ile Asp Glu Leu 20 25 30

Pro Glu Gly Ala Val Lys Pro Pro Ala Asn Lys Tyr Pro Ile Phe Phe 35 40 45

Phe Gly Thr His Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe Pro 50 55 60

Tyr Lys Glu Tyr Lys Asp Lys Phe Gly Lys Ser Asn Lys Arg Lys Gly 65 70 75 80

Phe Asn Glu Gly Leu Trp Glu Ile Glu Asn Asn Pro Gly Val Lys Phe 85 90 95

Thr Gly Tyr Gln Ala Ile Gln Gln Ser Ser Ser Glu Thr Glu Gly
100 105 110

Glu Gly Gly Asn Thr Ala Asp Ala Ser Ser Glu Glu Glu Gly Asp Arg 115 120 125 Val Glu Glu Asp Gly Lys Gly Lys Arg Lys Asn Glu Lys Ala Gly Ser 130 140

Lys Arg Lys Lys Ser Tyr Thr Ser Lys Lys Ser Ser Lys Gln Ser Arg 145 150 155 160

Lys Ser Pro Gly Asp Glu Asp Asp Lys Asp Cys Lys Glu Glu Glu Asn 165 170 175

Lys Ser Ser Ser Glu Gly Gly Asp Ala Gly Asn Asp Thr Arg Asn Thr
180 185 190

Thr Ser Asp Leu Gln Lys Thr Ser Glu Gly Thr 195 200

<210> 2265

<211> 253

<212> PRT

<213> Homo sapiens

<400> 2265

Met Arg Ser Gly Lys Met Ala Pro Lys Pro Gln Ser Arg Cys Thr Ser 1 5 10 15

Thr Arg Ser Ala Gly Glu Ala Pro Ser Glu Asn Gln Ser Pro Ser Lys
20 25 30

Gly Pro Glu Glu Ala Ser Ser Glu Val Gln Asp Thr Asn Glu Val His 35 40 45

Val Pro Gly Asp Gln Asp Glu Pro Gln Thr Leu Gly Lys Lys Gly Ser 50 55 60

Lys Asn Asn Ile Ser Val Tyr Met Thr Leu Asn Gln Lys Lys Ser Asp 65 70 75 80

Ser Ser Ser Ala Ser Val Cys Ser Ile Asp Ser Thr Asp Asp Leu Lys 85 90 95

Ser Ser Asn Ser Glu Cys Ser Ser Ser Glu Ser Phe Asp Phe Pro Pro 100 105 110

Gly Ser Met His Ala Pro Ser Thr Ser Ser Thr Ser Ser Ser Ser Lys 115 120 125

Glu Glu Lys Lys Leu Ser Asn Ser Leu Lys Met Lys Val Phe Ser Lys 130  $\,$  135  $\,$  140

Asn Val Ser Lys Cys Val Thr Pro Asp Gly Arg Thr Ile Cys Val Gly 145 150 155 160

Asp Ile Val Trp Ala Lys Ile Tyr Gly Phe Pro Trp Trp Pro Ala Arg 165 170 175

Ile Leu Thr Ile Thr Val Ser Arg Lys Asp Asn Gly Leu Leu Val Arg

Gln Glu Ala Arg Ile Ser Trp Phe Gly Ser Pro Thr Thr Ser Phe Leu

195 200 205

Ala Leu Ser Gln Leu Ser Pro Phe Leu Glu Asn Phe Gln Ser Arg Phe 210 215 220

Asn Lys Lys Arg Lys Gly Leu Tyr Arg Lys Ala Ile Thr Glu Ala Ala 225 230 235 240

Lys Ala Ala Lys Gln Leu Thr Pro Glu Val Arg Ala Cys 245 250

<210> 2266

<211> 314

<212> PRT

<213> Homo sapiens

<400> 2266

Met Pro His Ala Phe Lys Pro Gly Asp Leu Val Phe Ala Lys Met Lys 1  $\phantom{\bigg|}$  10  $\phantom{\bigg|}$  15

Gly Tyr Pro His Trp Pro Ala Arg Ile Asp Asp Ile Ala Asp Gly Ala 20 25 30

Val Lys Pro Pro Pro Asn Lys Tyr Pro Ile Phe Phe Gly Thr His  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe Pro Tyr Asp Lys Cys 50 60

Lys Asp Lys Tyr Gly Lys Pro Asn Lys Arg Lys Gly Phe Asn Glu Gly 65 70 75 80

Leu Trp Glu Ile Gln Asn Asn Pro His Ala Ser Tyr Ser Ala Pro Pro 85 90 95

Pro Val Ser Ser Ser Asp Ser Glu Ala Pro Glu Ala Asn Pro Ala Asp 100 105 110

Gly Ser Asp Ala Asp Glu Asp Asp Glu Asp Arg Gly Val Met Ala Val 115 120 125

Thr Ala Val Thr Ala Thr Ala Ala Ser Asp Arg Met Glu Ser Asp Ser 130 140

Asp Ser Asp Lys Ser Ser Asp Asn Ser Gly Leu Lys Arg Lys Thr Pro 145 150 155 160

Ala Leu Lys Met Ser Val Ser Lys Arg Ala Arg Lys Ala Ser Ser Asp

Leu Asp Gln Ala Ser Val Ser Pro Ser Glu Glu Glu Asn Ser Glu Ser 180 185 190

Ser Ser Glu Ser Glu Lys Thr Ser Asp Gln Asp Phe Thr Pro Glu Lys 195 200 205

Lys Ala Ala Val Arg Ala Pro Arg Gly Pro Leu Gly Gly Arg Lys 210 215 220

Lys Lys Lys Ala Pro Ser Ala Ser Asp Ser Asp Ser Lys Ala Asp Ser 225 230 235 240

Asp Gly Ala Lys Pro Glu Pro Val Ala Met Ala Arg Ser Ala Ser Ser 245 250 255

Ser Ser Ser Ser Ser Ser Ser Ser Asp Ser Asp Val Ser Val Lys Lys 260 265 270

Pro Pro Arg Gly Arg Lys Pro Thr Glu Lys Pro Leu Pro Lys Pro Arg 275 280 285

Gly Arg Lys Pro Lys Pro Glu Arg Pro Pro Ser Ser Ser Ser Asp 290 295 300

Ser Asp Ser Asp Glu Val Asp Arg Ile Thr 305 310

<210> 2267

<211> 281

<212> PRT

<213> Homo sapiens

<400> 2267

Met Gly Ser Arg Gly Gln Gly Leu Leu Leu Ala Tyr Cys Leu Leu Leu 1 5 10 15

Ala Phe Ala Ser Gly Leu Val Leu Ser Arg Val Pro His Val Gln Gly  $20 \\ 20 \\ 25 \\ 30$ 

Glu Gln Gln Glu Trp Glu Gly Thr Glu Glu Leu Pro Ser Pro Pro Asp \$35\$ \$40\$ \$45\$

His Ala Glu Arg Ala Glu Glu Gln His Glu Lys Tyr Arg Pro Ser Gln 50 60

Asp Gln Gly Leu Pro Ala Ser Arg Cys Leu Arg Cys Cys Asp Pro Gly 65 70 75 80

Thr Ser Met Tyr Pro Ala Thr Ala Val Pro Gln Ile Asn Ile Thr Ile 85 90 95

Leu Lys Gly Glu Lys Gly Asp Arg Gly Asp Arg Gly Leu Gln Gly Lys 100 105 110

Tyr Gly Lys Thr Gly Ser Ala Gly Ala Arg Gly His Thr Gly Pro Lys 115 120 125

Gly Gln Lys Gly Ser Met Gly Ala Pro Gly Glu Arg Cys Lys Ser His 130 135 140

Tyr Ala Ala Phe Ser Val Gly Arg Lys Lys Pro Met His Ser Asn His 145 150 155 160

Tyr Tyr Gln Thr Val Ile Phe Asp Thr Glu Phe Val Asn Leu Tyr Asp 165 170 175 His Phe Asn Met Phe Thr Gly Lys Phe Tyr Cys Tyr Val Pro Gly Leu 180 185 190

Tyr Phe Phe Ser Leu Asn Val His Thr Trp Asn Gln Lys Glu Thr Tyr 195 200 205

Leu His Ile Met Lys Asn Glu Glu Glu Val Ala Ile Leu Phe Ala Gln 210 215 220

Val Gly Asp Arg Ser Ile Met Gln Ser Gln Ser Leu Met Leu Glu Leu 225 230 235 240

Arg Glu Gln Asp Gln Val Trp Val Arg Leu Tyr Lys Gly Glu Arg Glu 245 250 255

Asn Ala Ile Phe Ser Glu Glu Leu Asp Thr Tyr Ile Thr Phe Ser Gly  $260 \hspace{1.5cm} 265 \hspace{1.5cm} 270 \hspace{1.5cm}$ 

Tyr Leu Val Lys His Ala Thr Glu Pro 275 280